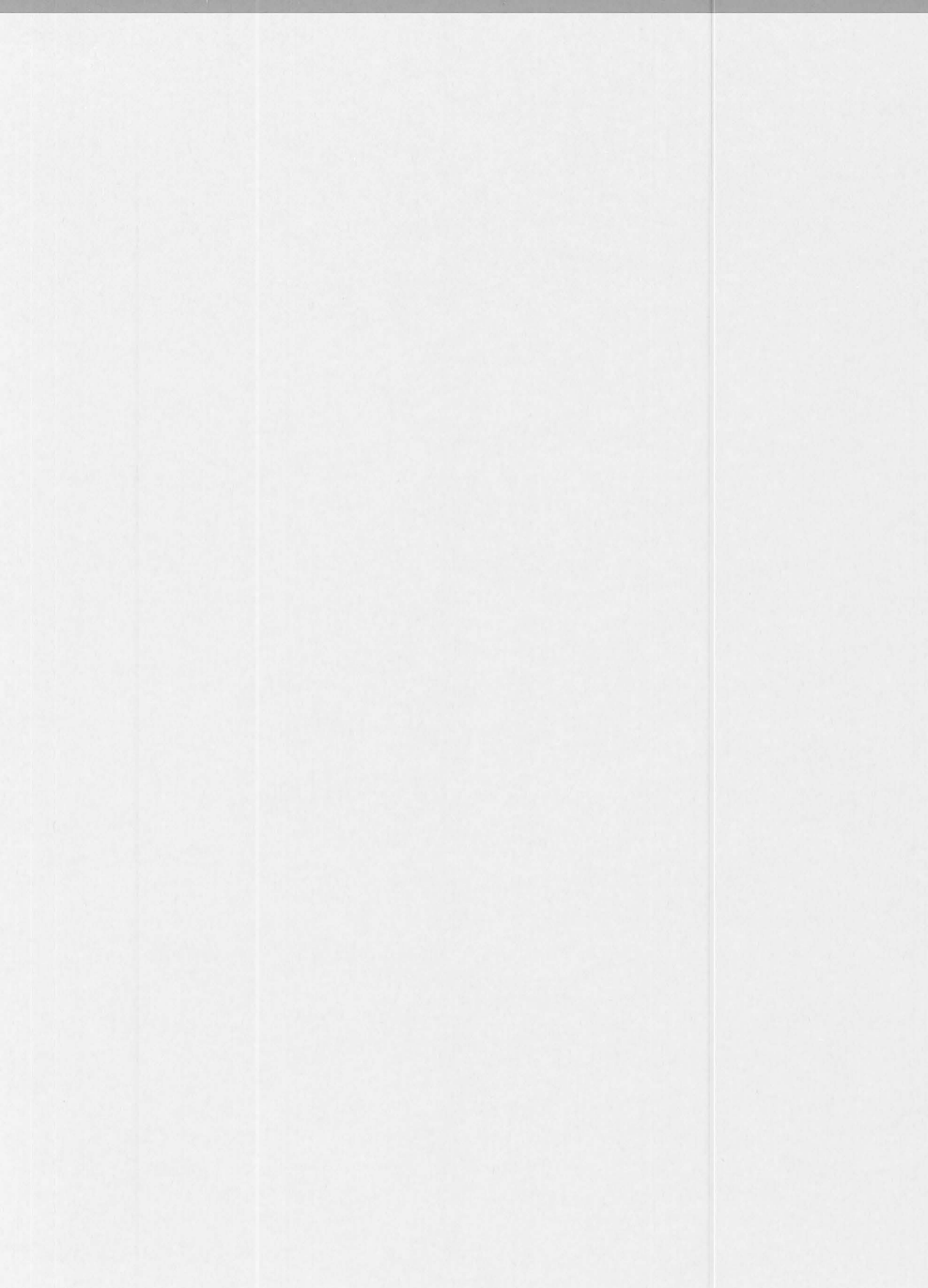


THE EUROPEAN COMMISSION



THE EUROPEAN AEROSPACE INDUSTRY
TRADING POSITION & FIGURES

1994



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THE EUROPEAN COMMISSION

Directorate-General III
- Industry -

III/4001/94-EN
Brussels, 1st April 1994

**The European Aerospace Industry
Trading Position and Figures
*** 1994 *****

(Commission Staff Working Paper)

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PREFACE

We have the pleasure to present you with the 1994 edition of the document

"The European aerospace industry - Trading position and figures".

This document is based on the most relevant statistics available to the European Commission on the world aerospace industry (*). Mentioning the source when using data, tables or graphs from this publication, would be appreciated a lot.

Directorate-General III - *Industry* has been compiling and collating these statistics since 1972.

Since the 1993 edition, a summary of European links in aerospace industry (beginning Chapter 2) and a table on non-Western civil aircraft (near end Chapter 2) have been included, as well as two new tables, on business aircraft deliveries and on civil and para-public helicopter deliveries (Chapter 3).

If you wish to receive the next edition, we request you to send the ad hoc form (see LEADER SHEET) as soon as possible to the following address:

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* *Further particulars:* Francisco ACOSTA [Phone: Int'l + 32-2-296.37.39] or Erwin MELAERTS [295.40.51]
Fax: 295.68.51/296.11.25

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CIVIL AIR TRAFFIC



CHAPTER 1

CIVIL AIR TRAFFIC

The data referring to the *world* civil air traffic correspond to scheduled operations of airlines of the (182) *ICAO* contracting States. The most recent figures were published in the "*ICAO Journal*" july/august 1993 issue, reviewing new facts in civil aviation during the year 1992, based on the *ICAO* Council's Annual Report, and forecasting the medium term of air transport as assessed by the *ICAO* air transport Directorate.

The data referring to the scheduled operations of *AEA* member airlines, according to the *AEA* Yearbook (Statistical Appendices), are broken down between the following groups of routes:

- **Domestic & Territorial:**

routes commencing and ending within the national frontiers of the *AEA* reporting carrier's country of registration;

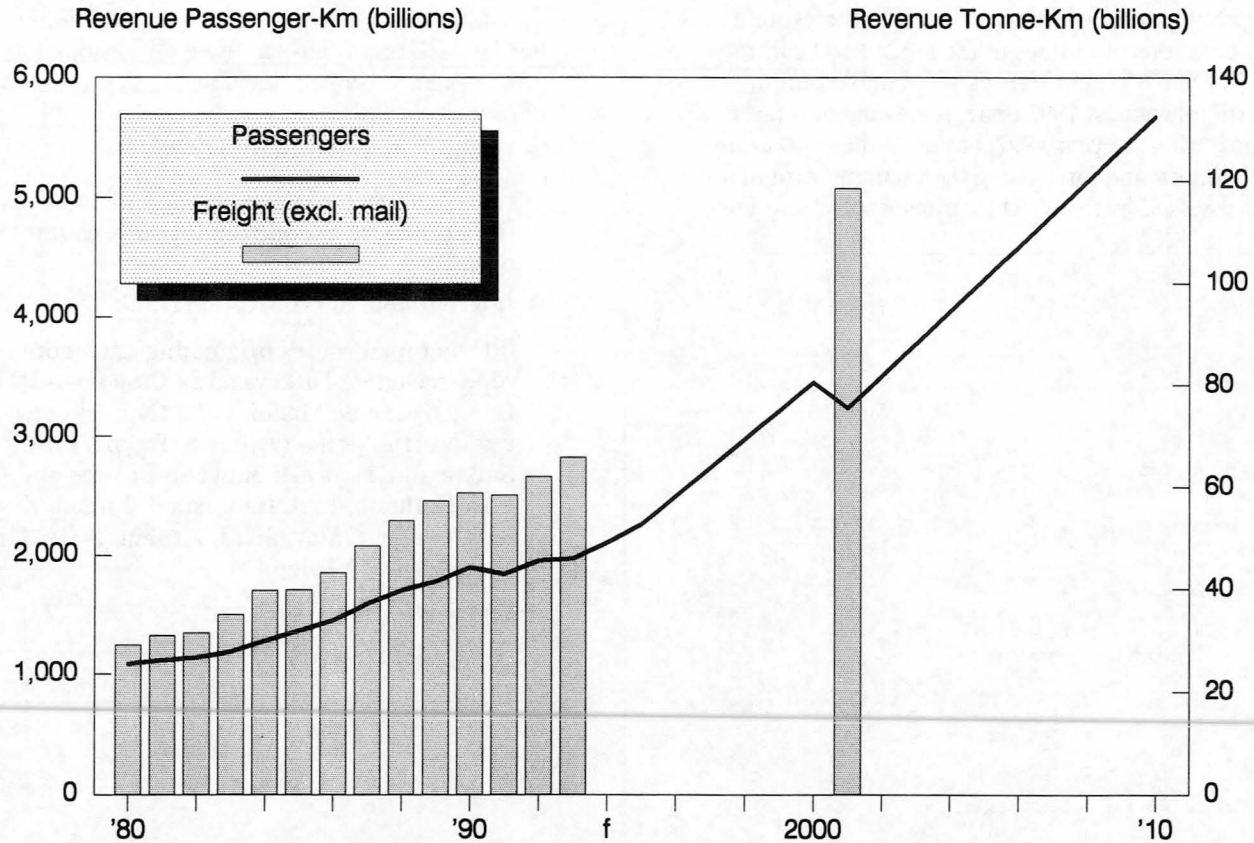
- **International Short/Medium Haul:**

international routes originating and ending within Europe (including Turkey and ex-USSR up to 55°E), Azores, Canary Islands, Madeira and Cyprus; between Europe and North Africa (Algeria, Egypt, Libya, Morocco, Sudan and Tunisia); between Europe and the Middle East (Bahrain, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, United Arab Emirates and Yemen);

- **Longhaul:**

other international routes.

World Scheduled Air Traffic (incl. Russian Federation)



■ SOURCE: ICAO / PRESS

WORLD SCHEDULED AIR TRAFFIC (INCLUDING RUSSIAN FEDERATION)

	PASSENGER TRAFFIC (BILLIONS)				CARGO TRAFFIC (MILLIONS)			
	PASSENGERS CARRIED	PASSENGER KMS	AVAILABLE SEATS KMS	LOAD FACTOR	FREIGHT TONS CARRIED	TOTAL CARGO TON KMS	FREIGHT	MAIL
1980	0.748	1,089	1,735	63%	11.1	32,813	88.8%	11.2%
1985	0.899	1,367	2,070	66%	13.7	44,240	90.1%	9.9%
1986	0.960	1,452	2,235	65%	14.7	47,740	90.5%	9.5%
1987	1.027	1,589	2,370	67%	16.1	53,050	91.2%	8.8%
1988	1.082	1,706	2,545	67%	17.3	58,190	91.7%	8.3%
1989	1.118	1,782	2,610	68%	18.1	62,310	91.9%	8.1%
1990	1.164	1,893	2,784	68%	18.3	64,150	91.7%	8.3%
1991	1.133	1,843	2,795	66%	17.6	63,560	92.0%	8.0%
1992	1.167	1,952	2,960	66%	17.3	68,300	90.9%	9.1%
1993 E	1.160	1,970	2,990	66%	17.5	-	-	-
1994 F	-	2,110	-	-	-	-	-	-
1995 F	-	2,260	-	-	-	-	-	-

ANNUAL GROWTH RATE (AS %)

	PASSENGER TRAFFIC				CARGO TRAFFIC			
	PASSENGERS CARRIED	PASSENGER KMS	AVAILABLE SEATS KMS	LOAD FACTOR (+/-POINTS)	FREIGHT TONS CARRIED	TOTAL CARGO TON KMS	FREIGHT TON KMS	MAIL TON KMS
1980	-0.8	2.7	8.4	-3	0.8	4.4	4.0	7.6
1985	6.0	7.0	5.3	1	2.2	0.6	0.4	2.1
1986	6.8	6.2	8.0	-1	7.3	7.9	8.4	3.4
1987	7.0	9.4	6.0	2	9.5	11.1	12.0	2.9
1988	5.4	7.4	7.4	-0	7.5	9.7	10.3	3.2
1989	3.3	4.5	2.6	1	4.6	7.1	7.3	4.6
1990	4.1	6.2	6.7	-0	1.1	3.0	2.7	5.3
1991	-2.7	-2.6	0.4	-2	-3.8	-0.9	-0.6	-4.3
1992	3.0	5.9	5.9	0	-1.7	7.5	6.2	21.8
1993 E	-0.6	0.9	1.0	-0	1.2	-	6.0	-
1994 F	-	7.1	-	-	-	-	-	-
1995 F	-	7.1	-	-	-	-	-	-

■ SOURCE: ICAO / PRESS

BREAKDOWN OF WORLD SCHEDULED PASSENGER TRAFFIC

REVENUE: PASSENGER KMS (BILLIONS)

	TOTAL	AEA	USA	RUSSIAN FEDERATION	REST OF THE WORLD
1975	697	17.8%	37.6%	17.6%	27.1%
1980	1,089	16.7%	37.6%	14.7%	31.0%
1981	1,117	16.9%	35.4%	15.3%	32.3%
1982	1,142	16.7%	35.8%	15.1%	32.4%
1983	1,190	16.1%	37.3%	14.8%	31.8%
1984	1,278	15.9%	37.5%	14.3%	32.3%
1985	1,367	15.8%	38.9%	13.7%	31.6%
1986	1,452	15.0%	40.2%	13.4%	31.4%
1987	1,589	15.5%	40.4%	12.6%	31.5%
1988	1,706	15.4%	39.8%	12.5%	32.3%
1989	1,782	15.9%	38.9%	12.7%	32.5%
1990	1,893	16.2%	38.8%	12.7%	32.3%
1991	1,843	15.6%	39.1%	12.2%	33.1%
1992	1,952	16.7%	39.2%	9.2%	35.0%

REVENUE: PASSENGER KMS (ANNUAL GROWTH RATE - AS %)

	TOTAL	AEA	USA	RUSSIAN FEDERATION	REST OF THE WORLD
1975	6.3	5.2	-0.1	12.7	12.7
1980	2.7	1.4	-0.6	6.4	6.1
1981	2.6	4.0	-3.2	6.9	6.7
1982	2.2	0.8	3.4	0.5	2.5
1983	4.2	0.3	8.5	2.4	2.3
1984	7.4	6.2	7.9	4.0	9.0
1985	7.0	6.4	10.9	2.3	4.8
1986	6.2	1.1	9.7	3.6	5.6
1987	9.4	12.8	10.0	3.0	9.8
1988	7.4	6.8	5.7	6.5	10.1
1989	4.5	7.6	2.2	6.4	5.0
1990	6.2	8.2	5.9	6.2	5.6
1991	-2.6	-6.2	-2.0	-6.7	-0.0
1992	5.9	13.3	6.2	-20.0	11.7

■ SOURCE: ICAO / AEA(YEARBOOK STATISTICAL APPENDICES)

AEA SCHEDULED PASSENGER TRAFFIC

	REVENUE: PASSENGER KMS (BILLIONS)			AVAILABLE SEATS KMS (BILLIONS)			LOAD FACTOR (%)		
	DOMESTIC	S-M HAUL	LONG HAUL	DOMESTIC	S-M HAUL	LONG HAUL	DOMESTIC	S-M HAUL	LONG HAUL
	1975	10.9	34.4	78.7	18.1	62.6	138.7	60.5	55.0
1980	19.3	48.1	114.2	30.2	86.3	185.1	63.9	55.8	61.7
1981	19.8	49.4	119.7	29.9	84.9	185.3	66.2	58.2	64.6
1982	20.7	49.2	120.6	31.3	85.7	185.6	66.3	57.4	64.9
1983	21.7	49.1	120.1	33.0	85.6	184.2	65.9	57.4	65.2
1984	22.3	53.3	127.1	32.8	89.5	187.2	67.8	59.6	67.9
1985	22.9	57.2	135.5	34.0	93.7	199.2	67.2	61.1	68.0
1986	23.8	57.0	137.3	35.3	96.8	208.3	67.5	58.8	65.9
1987	26.5	63.9	155.7	37.4	101.6	221.9	70.9	62.9	70.1
1988	28.4	69.2	165.3	41.2	111.2	235.9	68.8	62.2	70.1
1989	29.7	76.1	177.0	44.0	121.9	249.3	67.4	62.4	71.0
1990	31.2	83.1	191.7	46.1	133.2	272.6	67.6	62.4	70.3
1991	29.6	75.4	182.0	45.7	130.2	267.6	64.8	57.9	68.0
1992	31.7	86.3	207.1	48.1	148.9	296.9	66.0	57.9	69.8

ANNUAL GROWTH RATE (AS %)

	REVENUE: PASSENGER KMS			AVAILABLE SEATS KMS		
	DOMESTIC	S-M HAUL	LONG HAUL	DOMESTIC	S-M HAUL	LONG HAUL
1975	4.9	8.1	4.0	1.3	5.6	3.7
1980	-2.3	-3.3	4.3	1.9	2.6	9.4
1981	2.6	2.7	4.8	-1.0	-1.7	0.1
1982	4.5	-0.5	0.7	4.4	1.0	0.2
1983	4.9	-0.2	-0.4	5.5	-0.1	-0.8
1984	2.4	8.6	5.8	-0.6	4.5	1.7
1985	2.8	7.3	6.6	3.8	4.8	6.4
1986	4.2	-0.5	1.3	3.6	3.3	4.5
1987	11.1	12.2	13.4	5.9	4.9	6.6
1988	7.1	8.3	6.2	10.3	9.5	6.3
1989	4.7	10.0	7.1	6.9	9.6	5.7
1990	5.1	9.2	8.3	4.8	9.3	9.3
1991	-5.0	-9.3	-5.1	-0.9	-2.3	-1.8
1992	7.1	14.4	13.8	5.2	14.4	10.9

■ SOURCE: AEA(YEARBOOK STATISTICAL APPENDICES)

AEA SCHEDULED TOTAL CARGO (FREIGHT + MAIL) TRAFFIC

	REVENUE: CARGO TON KMS (MILLIONS)			AVAILABLE TON KMS (MILLIONS)			LOAD FACTOR (%)		
	DOMESTIC	S-M HAUL	LONG HAUL	DOMESTIC	S-M HAUL	LONG HAUL	DOMESTIC	S-M HAUL	LONG HAUL
	1975	148	652	4,557	411	1,787	8,802	35.9	36.5
1980	279	882	7,530	723	2,495	12,355	38.6	35.4	60.9
1981	289	874	7,917	739	2,349	12,816	39.0	37.2	61.8
1982	319	892	8,045	770	2,357	13,635	41.4	37.8	59.0
1983	343	949	9,042	773	2,417	14,049	44.4	39.2	64.4
1984	351	1,080	10,385	783	2,594	15,399	44.8	41.6	67.4
1985	362	1,131	10,836	856	2,825	16,837	42.3	40.0	64.4
1986	360	1,150	11,871	940	2,915	18,349	38.3	39.5	64.7
1987	393	1,163	13,089	1,061	3,105	19,899	37.1	37.4	65.8
1988	409	1,183	14,371	1,221	3,268	22,030	33.5	36.2	65.2
1989	396	1,269	15,534	1,353	3,738	23,546	29.3	33.9	66.0
1990	450	1,365	16,283	1,420	4,093	25,410	31.7	33.4	64.1
1991	427	1,219	15,953	1,418	3,947	25,876	30.1	30.9	61.7
1992	395	1,359	16,472	1,516	4,594	26,928	26.0	29.6	61.2

ANNUAL GROWTH RATE (AS %)

	REVENUE: CARGO TON KMS			AVAILABLE TON KMS		
	DOMESTIC	S-M HAUL	LONG HAUL	DOMESTIC	S-M HAUL	LONG HAUL
1975	-3.3	0.2	-1.0	4.2	12.2	9.3
1980	-0.7	-2.0	5.0	6.2	0.4	7.0
1981	3.5	-0.9	5.1	2.2	-5.9	3.7
1982	10.4	2.0	1.6	4.2	0.4	6.4
1983	7.7	6.4	12.4	0.4	2.5	3.0
1984	2.3	13.9	14.8	1.3	7.3	9.6
1985	3.1	4.8	4.3	9.3	8.9	9.3
1986	-0.5	1.7	9.6	9.8	3.2	9.0
1987	9.2	1.1	10.3	12.8	6.5	8.4
1988	4.0	1.8	9.8	15.1	5.2	10.7
1989	-3.1	7.2	8.1	10.8	14.4	6.9
1990	13.7	7.6	4.8	5.0	9.5	7.9
1991	-5.2	-10.7	-2.0	-0.1	-3.6	1.8
1992	-7.6	11.5	3.3	6.9	16.4	4.1

SOURCE: AEA(YEARBOOK STATISTICAL APPENDICES)

CIVIL TRANSPORT AIRCRAFT



CHAPTER 2

CIVIL TRANSPORT AIRCRAFT

The figures relating to the *civil jet aircraft* orders, deliveries and backlogs [aircraft ordered but not yet delivered] are partly provided by individual EU manufacturers (Airbus, BAe, Fokker), partly reproduced from BOEING's "World Jet Airplane Inventory - Year-End 1992". So, 1993 cancellations of previous orders are not taken into account outside the EU.

The figures relating to the *civil transport aircraft* fleet, deliveries, orders and fleet age are provided by AÉROSPATIALE and cover almost all the civil transport aircraft produced in the western world. The origin of these statistics is "L'État des flottes commerciales", database on civil transport aircraft of more than 18 seats.

The statistics relate to *civil transport aircraft*. Therefore, civil transport aircraft used by public authorities are included, while such aircraft may also be included in the statistics relating to military aircraft, which are given in Chapter 4.

The *civil transport aircraft* breakdown is carried out using the following criteria:

- **aircraft category (operational possibility)**
 - ☒ short-haul turboprop
 - ☒ short- and medium-haul jet
 - ☒ long-haul jet
- **design origin: Europe, USA and rest of the world**

The *geographical market areas* are defined as follows:

- *EU*
- *Other Europe:* Albania, Austria, Bulgaria, ex-Czechoslovakia, Finland, Hungary, Iceland, Lithuania, Malta, Norway, Poland, Romania, Russia, Sweden, Switzerland, Ukraine and ex-Yugoslavia
- *USA*
- *Rest of the world*

For each category of civil transport aircraft, the tables show *aircraft in service* (at year-end), *aircraft (annual) deliveries* and *aircraft orders* (in backlog - at year-end), as follows:

- the *number of aircraft*,
- the *number of seats* (aircraft * capacity),
- the *present value*, which is estimated using a linear depreciation on 20 years and the following value per seat (in 1992\$):
 - ☒ \$235,000 for the short-haul turboprops,
 - ☒ \$280,000 for the short- and medium-haul jets,
 - ☒ \$330,000 for the long-haul jets.

For each category of civil transport aircraft, the following tables are given:

- *absolute total figures*
- *(including geographical breakdown),*
- *market share of EU-built aircraft by area,*
- *geographical breakdown of EU-built aircraft.*

Major Joint European Civil Aircraft Programmes

Consortium Programme	Airbus(*)	ATR	Airtech CN 235	AAA(**)	EC.120	Eurofar	BK117	SATIC Beluga	ALH
Type	airliners	regional aircraft	regional aircraft	amphibian aircraft	light heli	tiltrotor	multirole heli	outside cargo	light heli
AS/ECF (Fr)	37.9%	50%			61%	46%		50%	
Agusta (It)						X			
Alenia (It)		50%		X					
BAe (UK)	20.0%								
CASA (Es)	4.2%		50%			X			
CATIC (China)					24%				
DASA/ECD (De)	37.9%					22%	X	50%	X
HAI (Gr)				X					
HAL (India)									X
IPTN (Indonesia)			50%						
K.H.I. (Japan)							X		
Per Udsen (Dk)				X					
SOKO (ex-Yugo)				15%					
Singapore Ae					15%				
Westland (UK)						32%			

* Belairbus (Be) and Fokker (Nl) associated - ** OGMA (Po) associated

Major Joint European Military Aircraft Programmes

Consortium	Panavia		Euro- fighter	Euroflag	Euro- patrol	Euro- copter	EHI		MRTT		
Programme	AMX	Harrier II+	Tornado	EF2000	FLA	Tiger	NH90	EH101	PTS-2000		
Type	attack aircraft	attack aircraft	bomber/ interdictor	attack aircraft	transport aircraft	AEW aircraft	attack heli	transport heli	transport heli	training system	tanker transport
Aermacchi (It)	X									X	
Agusta (It)							26%	50%			
Alenia (It)	46.5%		15.0%	21%	X	X					
AS/ECF (Fr)					20%		50%	43%			X
BAe (UK)		40%	42.5%	33%	X	X				X	X
CASA (Es)				13%	X	X				X	
DASA/ECD (De)			42.5%	33%	X	X	50%	24%		X	X
Dassault (Fr)						X					
Embraer (Brazil)	X										
Fokker (NI)						X		7%			
McDD (US)		60%									
Westland (UK)								50%			
Others					X					X	

Major Joint European Space and Missiles Programmes

Consortium	Euro-Hermespace	Arianespace	Eurosatellite	Satcom International	Euromissile	Euromissile Dynamics Group
Type	spaceship	launcher	satellite	satellite	missile	missile
Aérospatiale (Fr)	26.3%	X	24%		50%	33.3%
Alenia (It)	15.0%	X				
British Aerospace (UK)		X		50%		33.3%
CASA (Es)		X				
DASA (De)	33.4%		36%		50%	33.3%
Dassault Aviation (Fr)	25.3%					
Matra (Fr)		X		50%		
Others	X	X	40%			

Major Joint European Engine Programmes

consortium		Eurofan	CFM Int'l	IAE	Eurojet	Turbo-Union	MTR	RTM	
programme	BR700	"Project Blue"		V2500	EJ200	RB199		RTM322	GE90
type	turbofan (+ APU)	turbofan	turbofan	turbofan	turbofan	turbofan	turboshaft	turboshaft	turbofan
BMW (De)	50.5%								
FiatAvio (It)				6%	21%	20%			7.00%
GE (US)		20%	50%						59.09%
I.-H.H.I. (Japan)									8.66%
ITP (Es)					13%				
JAЕ (Japan)				23%					
MTU-München (De)		30%		11%	33%	40%	33.3%		
P&W (US)		20%		30%					
Rolls-Royce (UK)	49.5%			30%	33%	40%	33.3%	50%	
SNECMA (Fr)		30%	50%						25.25%
Turbomeca (Fr)							33.3%	50%	

Following aircraft (alphabetically listed by category of operational possibility) are included in AÉROSPATIALE's "L'État des flottes commerciales" 31/12/92.

Short-haul Civil Transport Turboprops

<i>Model</i>	<i>Design</i>	<i>Seats</i>
ATR 42	Europe	46
ATR 72	Europe	66
BAe Jetstream 31	Europe	19
BAe Jetstream 41	Europe	28
Avro HS 748 (100/200)	Europe	46
BAe ATP	Europe	64
Beech 1900	USA	19
CASA 212	Europe	19
CASA CN 235	Europe	38
Convair CV 580/600/640	USA	51
DHC-6	Other	18
DHC-7 (100)	Other	50
DHC-8	Other	36
Dornier DO 228	Europe	19
Dornier DO 328	Europe	30
Embraer 110 Bandeirante (P1/P2)	Other	17
Embraer 120 Brasilia	Other	30
Fokker F 27/FH 227	Europe	46
Fokker F 50	Europe	50
HP Dart Herald	Europe	50
Fairchild Metro II/III	USA	19
Mohawk / Nord 262	Europe	27

Saab SF 340	Europe	35
Saab 2000	Europe	50
Shorts SD 320/330	Europe	30
Shorts SD 360	Europe	36
Vickers Viscount	Europe	69
NAMC YS 11A	Other	61

Short/medium-haul Civil Transport Jets

<i>Model</i>	<i>Design</i>	<i>Seats</i>
A 300	Europe	260
A 310	Europe	216
A 319	Europe	130
A 320	Europe	150
A 321	Europe	175
A 330	Europe	328
BAC 111	Europe	92
BAe 146	Europe	95
B 720	USA	150
B 727	USA	151
B 737-100/200	USA	115
B 737-300	USA	125
B 737-400	USA	135
B 737-500	USA	120
B 747-SR	USA	530
B 757	USA	189
B 767	USA	211
B 777	USA	300

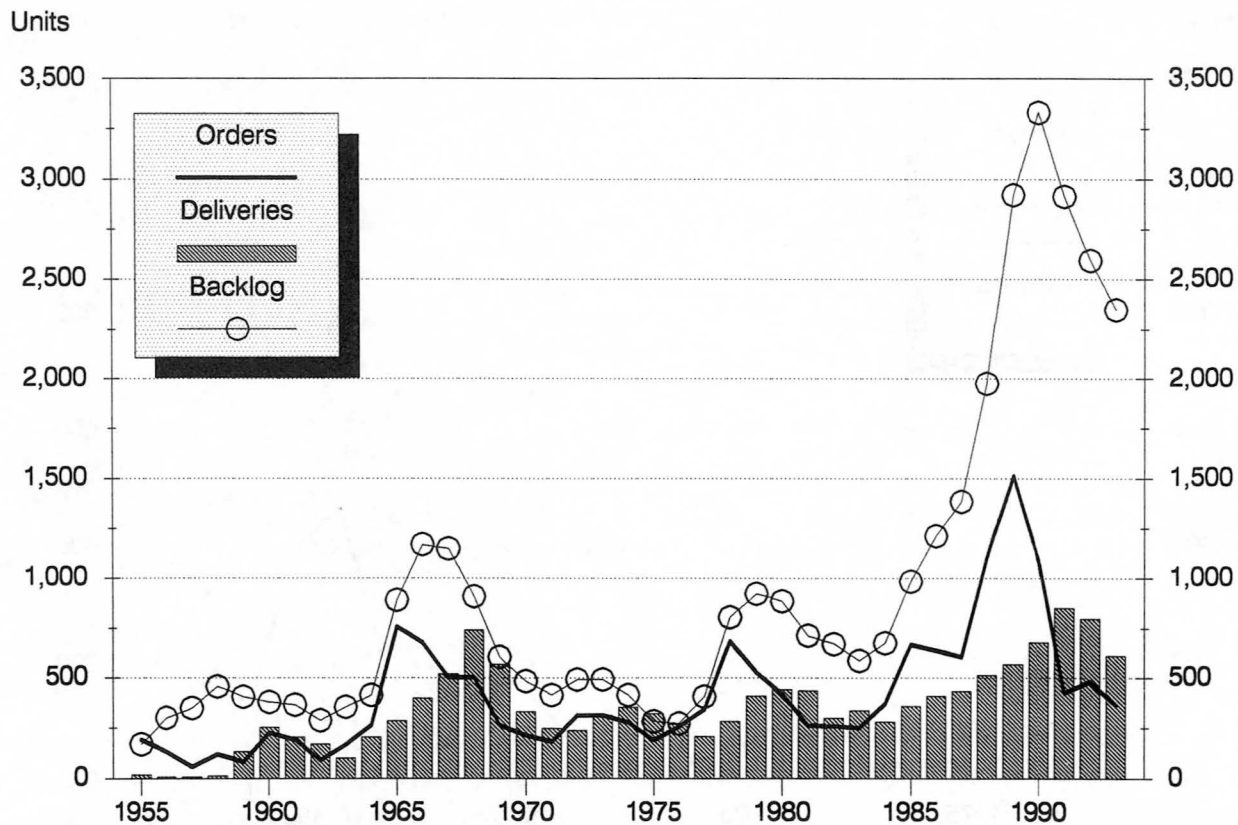
Short/medium-haul Civil Transport Jets (continued)

<i>Model</i>	<i>Design</i>	<i>Seats</i>
Caravelle	Europe	100
DC 9	USA	110
DC 10-10(F)/15	USA	259
MD 80	USA	144
MD 92	USA	150
Lockheed Electra	USA	78
Fokker F 28	Europe	76
Fokker F 100	Europe	100
Mercure	Europe	150
Trident	Europe	118
Tristar L1011-1(F)/100/150	USA	288

Long-haul Civil Transport Jets

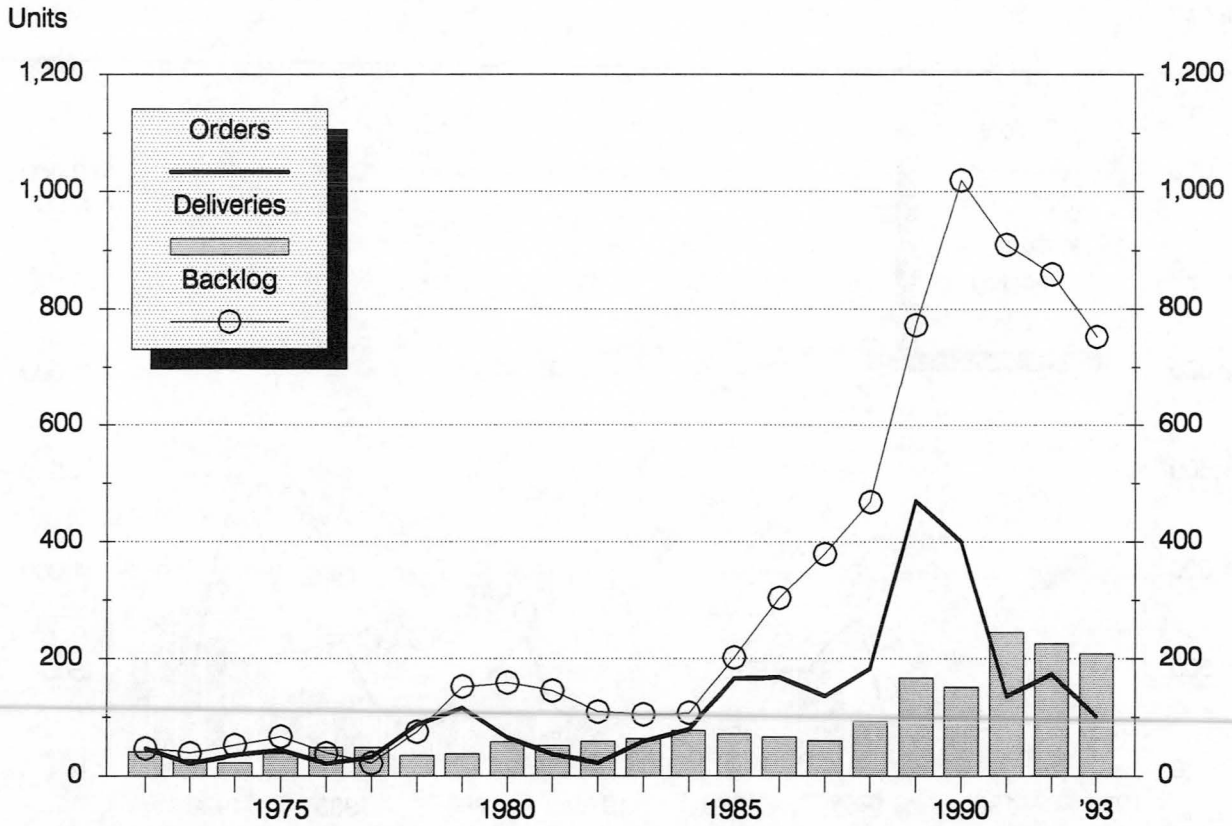
<i>Model</i>	<i>Design</i>	<i>Seats</i>
A 340	Europe	295
B 707	USA	155
B 747	USA	407
B 747-SP	USA	267
B 747-300 (SC/SCD/SR)	USA	440
B 747-400 (SR)	USA	440
Concorde	Europe	100
DC 8	USA	190
DC 10-30(F)/40	USA	259
MD 11	USA	287
Tristar L1011-50/200/250/500(F)	USA	250

Civil Jet Aircraft World Market



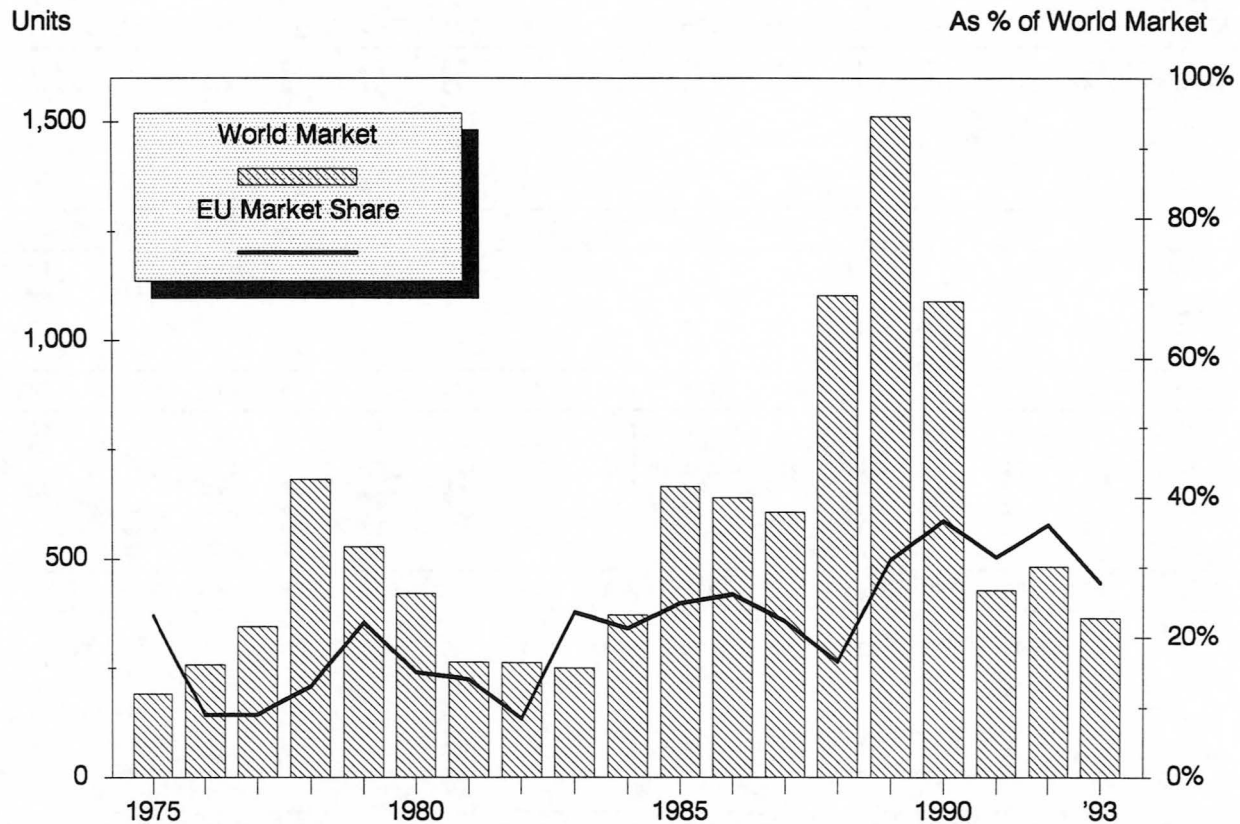
■ SOURCE: BOEING WORLD JET AIRPLANE INVENTORY YEAR-END 1992 / MANUFACTURERS-PRESS: 1993

EU-designed Civil Jet Aircraft World Market



■ SOURCE: Airbus, BAe, Fokker

Civil Jet Aircraft Orders



■ SOURCE: BOEING WORLD JET AIRPLANE INVENTORY YEAR-END 1992 / MANUFACTURERS-PRESS: 1993

CIVIL JET AIRCRAFT ORDERS (UNITS)

	UNTIL 1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1981 - 1993	GRAND TOTAL
A-300	222	15	3		19	16	7	29	21	54	29	40	18	6	257	479
A-310	48	4	11	10	14	25	16	28	22	23	31	12	14	3	213	261
A-319													6		6	6
A-320					16	58	92	53	92	110	133	15	61	13	643	643
A-321										20	117	3	13		153	153
A-330									3	83	25	5	1	1	118	118
A-340									2	49	6	23	22	15	117	117
AIRBUS	270	19	14	10	49	99	115	110	140	339	341	98	135	38	1,507	1,777
BAC 111	230		1	1	2	6									10	240
BAE 146/RJ CONCORDE		4	4	24	9	16	21	24	34	32	26	27	21	11	253	253
F.28	14															14
F.JETLINE	168	14	3	24	11	19	2								73	241
					8	26	30	1	8	99	33	10	18	52	285	285
EUROPE	682	37	22	59	79	166	168	135	182	470	400	135	174	101	2,128	2,810
B-707	808		5	15			6	11			11				48	856
B-727	1,781	38	11	1											50	1,831
B-737	856	122	71	64	130	283	211	181	339	453	156	71	114	110	2,305	3,161
B-747	557	23	14	24	22	42	83	67	49	68	172	38	28	2	632	1,189
B-757	102	3	2	26	2	45	13	45	159	227	97	49	38	40	746	848
B-767	131	7	2	16	10	21	23	57	82	125	52	70	21	66	552	683
B-777											49	27	42	29	147	147
BOEING	4,235	193	105	146	164	391	336	361	629	873	537	255	243	247	4,480	8,715
DC-9	974	2													2	976
MD-80	78	19	87	43	117	106	120	88	244	146	50	28	31	10	1,089	1,167
MD-90											51		26		77	77
DC-10	370	8	48	2	6	3	5	2	2						76	446
MD-11							11	20	47	24	53	10	8	5	178	178
MC DD	1,422	29	135	45	123	109	136	110	293	170	154	38	65	15	1,422	2,844
L.1011	239	5			5										10	249
TOTAL	6,578	264	262	250	371	666	640	606	1,104	1,513	1,091	428	482	363	8,040	14,618

■ SOURCE: BOEING WORLD JET AIRPLANE INVENTORY YEAR-END 1992 / MANUFACTURERS-PRESS: 1993

CIVIL JET AIRCRAFT ORDERS (UNITS)

MARKET SHARE OF EU BUILT AIRCRAFT (AS % OF WORLD TOTAL)

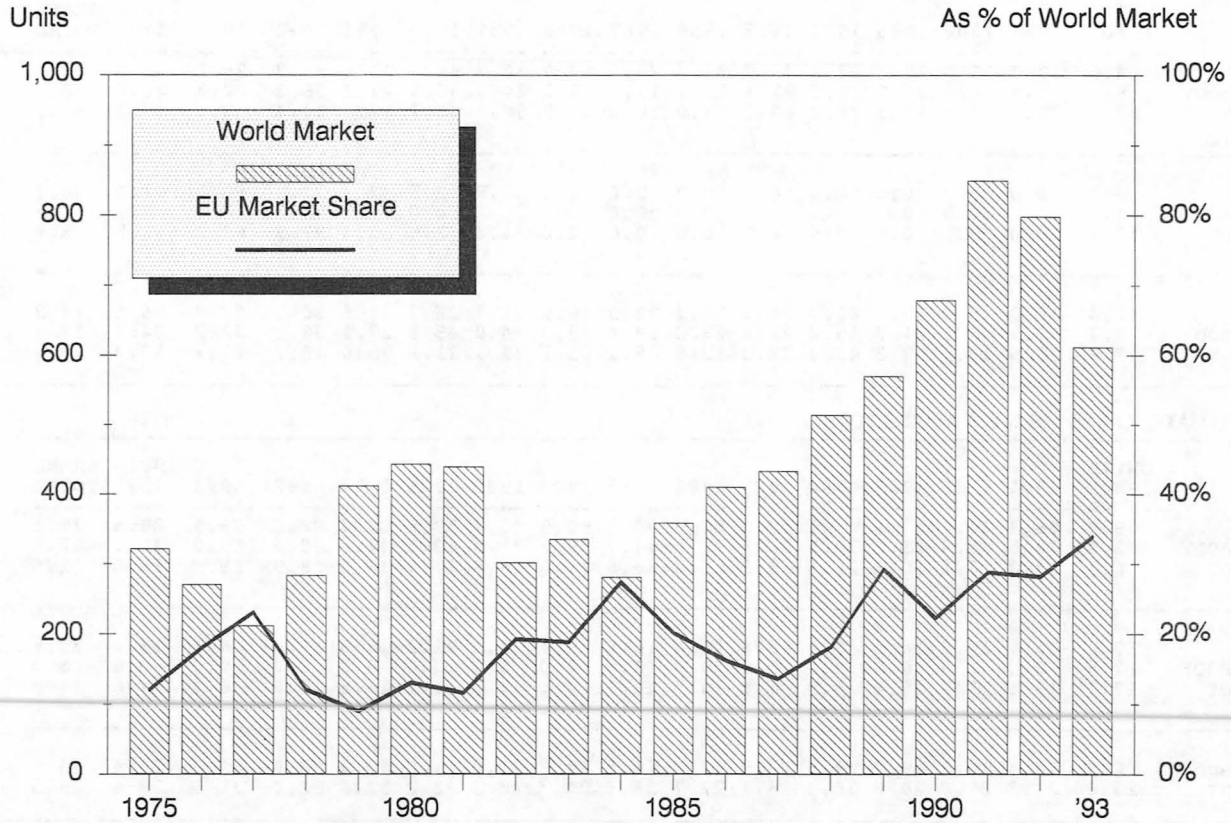
	UNTIL 1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1981- 1993	GRAND TOTAL
S-M HAUL	14.6	16.2	11.3	28.2	23.4	26.7	31.4	26.7	17.9	30.7	46.4	31.4	35.8	25.2	28.8	23.2
... NARROW BODY	9.5	8.9	4.5	26.8	15.6	22.4	29.7	19.9	15.3	24.0	46.6	27.1	36.3	32.2	25.0	18.4
... WIDE BODY	67.3	73.1	87.5	38.5	76.7	66.1	50.0	50.0	35.9	56.1	45.7	37.0	34.4	9.5	45.7	50.8
LONG HAUL	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	34.8	2.5	32.4	37.9	68.2	11.0	4.3
... NARROW BODY	1.7	-	0.0	0.0	-	-	0.0	0.0	-	-	0.0	-	-	-	0.0	1.6
... WIDE BODY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	34.8	2.6	32.4	37.9	68.2	11.5	5.4
TOTAL	10.4	14.0	8.4	23.6	21.3	24.9	26.2	22.3	16.5	31.1	36.7	31.5	36.1	27.8	26.5	19.2
... NARROW BODY	8.2	8.9	4.3	24.7	15.6	22.4	29.3	19.4	15.3	24.0	45.8	27.1	36.3	32.2	24.8	17.1
... WIDE BODY	17.2	30.6	17.9	19.2	43.4	38.3	15.9	28.1	21.1	49.1	21.8	35.6	35.7	19.7	30.7	25.2

BREAKDOWN INTO CATEGORIES (AS % OF WORLD TOTAL)

	UNTIL 1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1981- 1993	GRAND TOTAL
S-M HAUL	69.8	86.4	74.4	83.6	91.1	93.2	83.6	83.5	90.9	90.7	77.8	83.4	88.0	93.9	86.8	79.1
... NARROW BODY	63.7	76.5	68.3	73.2	79.5	83.9	76.4	64.7	79.3	71.8	60.8	47.4	68.0	65.0	70.8	67.6
... WIDE BODY	6.1	9.8	6.1	10.4	11.6	9.3	7.2	18.8	11.6	18.8	17.0	36.0	19.9	28.9	16.0	11.5
LONG HAUL	30.2	13.6	25.6	16.4	8.9	6.8	16.4	16.5	9.1	9.3	22.2	16.6	12.0	6.1	13.2	20.9
... NARROW BODY	12.5	0.0	1.9	6.0	0.0	0.0	0.9	1.8	0.0	0.0	1.0	0.0	0.0	0.0	0.6	6.0
... WIDE BODY	17.7	13.6	23.7	10.4	8.9	6.8	15.5	14.7	9.1	9.3	21.2	16.6	12.0	6.1	12.6	14.9
ALL NARROW BODY	76.2	76.5	70.2	79.2	79.5	83.9	77.3	66.5	79.3	71.8	61.8	47.4	68.0	65.0	71.4	73.5
... WIDE BODY	23.8	23.5	29.8	20.8	20.5	16.1	22.7	33.5	20.7	28.2	38.2	52.6	32.0	35.0	28.6	26.5

■ SOURCE: BOEING WORLD JET AIRPLANE INVENTORY YEAR-END 1992 / MANUFACTURERS-PRESS: 1993

CIVIL JET AIRCRAFT DELIVERIES



■ SOURCE: BOEING WORLD JET AIRPLANE INVENTORY YEAR - END 1992 / MANUFACTURERS-PRESS: 1993

CIVIL JET AIRCRAFT DELIVERIES (UNITS)

	UNTIL 1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1981 - 1993	GRAND TOTAL
A-300	121	37	46	19	19	16	11	10	17	24	19	25	22	22	287	408
A-310				17	29	26	19	21	28	23	18	19	24	22	246	246
A-319																
A-320									16	58	58	119	111	71	433	433
A-321																
A-330														1	1	1
A-340														22	22	22
AIRBUS	121	37	46	36	48	42	30	31	61	105	95	163	157	138	989	1,110
BAC 111	227	2	2	1	2	18	2	3	21	1	25	26	1	17	14	241
BAE 146/RJ				10	10	23	23	23	36	36	25	26	13	17	222	222
CONCORDE	14															14
F.28	161	12	10	16	17	12	11	2							80	241
F. JETLINE									11	25	31	56	54	53	230	230
EUROPE	523	51	58	63	77	72	66	59	93	167	151	245	225	208	1,535	2,058
B-707	785	2	8	8	8	3	4	9		5	4	14	5		70	855
B-727	1,692	94	26	11	8										139	1,831
B-737	715	108	95	82	67	115	141	161	165	146	174	215	218	152	1,839	2,554
B-747	487	53	25	23	16	24	35	23	24	45	70	64	61	56	519	1,006
B-757			2	25	18	36	35	40	48	51	77	80	99	71	582	582
B-767			20	55	29	25	27	37	53	37	60	62	63	51	519	519
B-777																
BOEING	3,679	257	176	204	146	203	242	270	290	284	385	435	446	330	3,668	7,347
DC-9	950	16	10												26	976
MD-80	5	62	33	51	44	71	85	94	120	117	139	139	85	41	1,081	1,086
MD-90																
DC-10	339	25	11	12	10	11	17	10	10	1					107	446
MD-11											3	31	42	32	108	108
MC DD	1,294	103	54	63	54	82	102	104	130	118	142	170	127	73	1,322	2,616
L.1011	195	28	14	6	4	2									54	249
TOTAL	5,691	439	302	336	281	359	410	433	513	569	678	850	798	611	6,579	12,270

■ SOURCE: BOEING WORLD JET AIRPLANE INVENTORY YEAR-END 1992 / MANUFACTURERS-PRESS: 1993

CIVIL JET AIRCRAFT DELIVERIES (UNITS)

MARKET SHARE OF EU BUILT AIRCRAFT (AS % OF WORLD TOTAL)

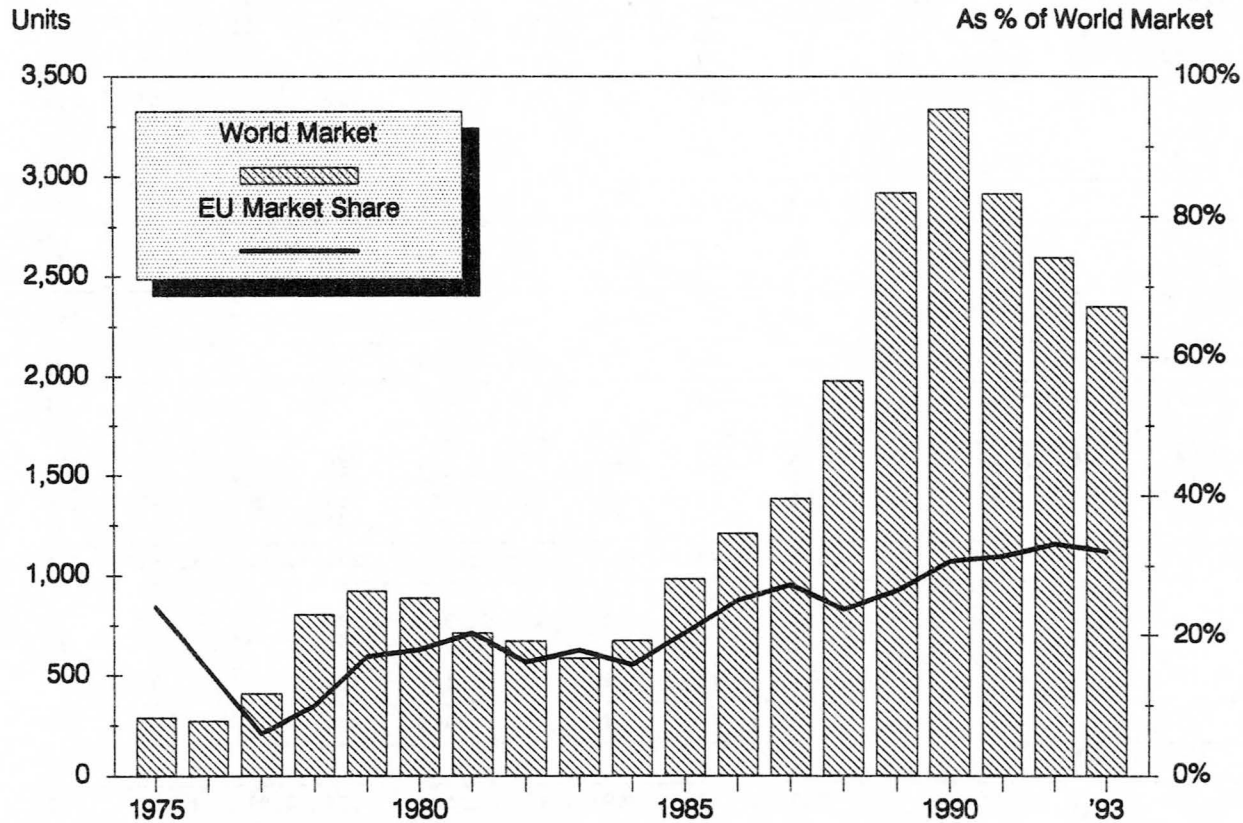
	UNTIL 1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1981- 1993	GRAND TOTAL
S-M HAUL	13.1	15.4	23.8	22.0	31.7	22.6	18.6	15.1	19.4	32.2	25.1	33.1	32.6	37.1	26.5	21.1
... NARROW BODY	10.3	4.8	6.7	13.8	17.5	11.9	12.1	8.7	12.6	27.6	22.6	31.7	30.8	34.8	21.1	16.3
... WIDE BODY	100.0	100.0	69.7	39.6	62.3	62.7	52.6	45.6	45.9	56.0	38.1	41.5	42.2	46.9	50.7	55.8
LONG HAUL	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	2.5	1.3
... NARROW BODY	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	1.6
... WIDE BODY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	2.7	1.2
TOTAL	9.2	11.6	19.2	18.8	27.4	20.1	16.1	13.6	18.1	29.3	22.3	28.8	28.2	34.0	23.3	16.8
... NARROW BODY	8.8	4.7	6.5	13.2	16.7	11.8	12.0	8.4	12.6	27.3	22.4	31.0	30.5	34.8	20.8	14.9
... WIDE BODY	10.6	25.9	39.7	27.3	44.9	40.4	27.5	30.7	34.1	36.2	21.8	21.9	21.7	32.5	29.8	22.5

BREAKDOWN INTO CATEGORIES (AS % OF WORLD TOTAL)

	UNTIL 1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1981- 1993	GRAND TOTAL
S-M HAUL	68.0	75.4	80.8	85.4	86.5	88.9	86.3	90.3	93.4	91.0	88.6	87.2	86.5	82.0	86.6	78.0
... NARROW BODY	65.9	67.0	58.9	58.3	59.1	70.2	72.4	74.6	74.3	76.3	74.3	74.7	72.8	66.3	70.6	68.4
... WIDE BODY	2.1	8.4	21.9	27.1	27.4	18.7	13.9	15.7	19.1	14.8	14.3	12.5	13.7	15.7	16.0	9.6
LONG HAUL	32.0	24.6	19.2	14.6	13.5	11.1	13.7	9.7	6.6	9.0	11.4	12.8	13.5	18.0	13.4	22.0
... NARROW BODY	14.0	0.5	2.6	2.4	2.8	0.8	1.0	2.1	0.0	0.9	0.6	1.6	0.6	0.0	1.1	7.1
... WIDE BODY	17.9	24.1	16.6	12.2	10.7	10.3	12.7	7.6	6.6	8.1	10.8	11.2	12.9	18.0	12.3	14.9
ALL NARROW BODY	79.9	67.4	61.6	60.7	61.9	71.0	73.4	76.7	74.3	77.2	74.9	76.4	73.4	66.3	71.7	75.5
... WIDE BODY	20.1	32.6	38.4	39.3	38.1	29.0	26.6	23.3	25.7	22.8	25.1	23.6	26.6	33.7	28.3	24.5

■ SOURCE: BOEING WORLD JET AIRPLANE INVENTORY YEAR-END 1992 / MANUFACTURERS-PRESS: 1993

CIVIL JET AIRCRAFT BACKLOG



■ SOURCE: BOEING WORLD JET AIRPLANE INVENTORY YEAR - END 1992 / MANUFACTURERS-PRESS: 1993

CIVIL JET AIRCRAFT BACKLOG (UNITS)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
A-300	79	36	17	17	17	13	32	36	66	76	91	87	71
A-310	52	63	56	41	40	37	44	38	38	51	44	34	15
A-319												6	6
A-320				16	74	166	219	295	347	422	318	268	210
A-321									20	137	140	153	153
A-330								3	86	111	116	117	117
A-340								2	51	57	80	102	95
AIRBUS	131	99	73	74	131	216	295	374	608	854	789	767	667
BAC 111	1				6	4	1	1				1	1
BAE 146/RJ	4	8	22	21	19	17	18	31	27	28	29	37	31
CONCORDE													
F.28	9	2	10	4	11	2							
F.JETLINE				8	34	64	65	62	136	138	92	56	55
EUROPE	145	109	105	107	201	303	379	468	771	1,020	910	859	752
B-707	21	18	25	17	14	16	18	18	13	20	6	1	1
B-727	33	18	8										
B-737	155	131	113	176	344	414	434	608	915	897	753	649	607
B-747	40	29	30	36	54	102	146	171	194	296	270	237	183
B-757	105	105	106	90	99	77	82	193	369	389	358	297	266
B-767	138	120	81	62	58	54	74	103	191	183	191	149	164
B-777										49	76	118	147
BOEING	492	421	363	381	569	663	754	1,093	1,682	1,834	1,654	1,451	1,368
DC-9	10												
MD-80	30	84	76	149	184	219	213	337	366	277	166	112	81
MD-90										51	51	77	77
DC-10	14	51	41	37	29	17	9	1					
MD-11						11	31	78	102	152	131	97	70
MC DD	54	135	117	186	213	247	253	416	468	480	348	286	228
L.1011	21	7	1	2									
TOTAL	712	672	586	676	983	1,213	1,386	1,977	2,921	3,334	2,912	2,596	2,348

■ SOURCE: BOEING WORLD JET AIRPLANE INVENTORY YEAR-END 1992 / MANUFACTURERS-PRESS: 1993

CIVIL JET AIRCRAFT BACKLOG (UNITS)

MARKET SHARE OF EU BUILT AIRCRAFT (AS % OF WORLD TOTAL)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
S-M HAUL	23.5	19.2	21.5	18.3	22.7	28.4	32.1	27.3	28.1	34.3	34.2	35.1	32.9
... NARROW BODY	4.0	2.9	9.6	10.6	18.7	26.3	29.4	25.5	24.3	31.0	30.4	31.4	30.6
... WIDE BODY	48.7	45.2	47.4	48.3	49.6	48.1	50.7	42.8	49.9	50.6	48.5	47.1	39.5
LONG HAUL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	14.2	10.9	16.4	23.3	27.2
... NARROW BODY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
... WIDE BODY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	14.7	11.3	16.6	23.4	27.3
TOTAL	20.4	16.2	17.9	15.8	20.4	25.0	27.3	23.7	26.4	30.6	31.3	33.1	32.0
... NARROW BODY	3.8	2.7	8.9	10.2	18.3	25.8	28.9	25.2	24.2	30.7	30.3	31.4	30.6
... WIDE BODY	38.1	32.4	32.3	29.7	28.8	21.4	22.6	18.3	33.1	30.3	33.1	36.1	34.6

BREAKDOWN INTO CATEGORIES (AS % OF WORLD TOTAL)

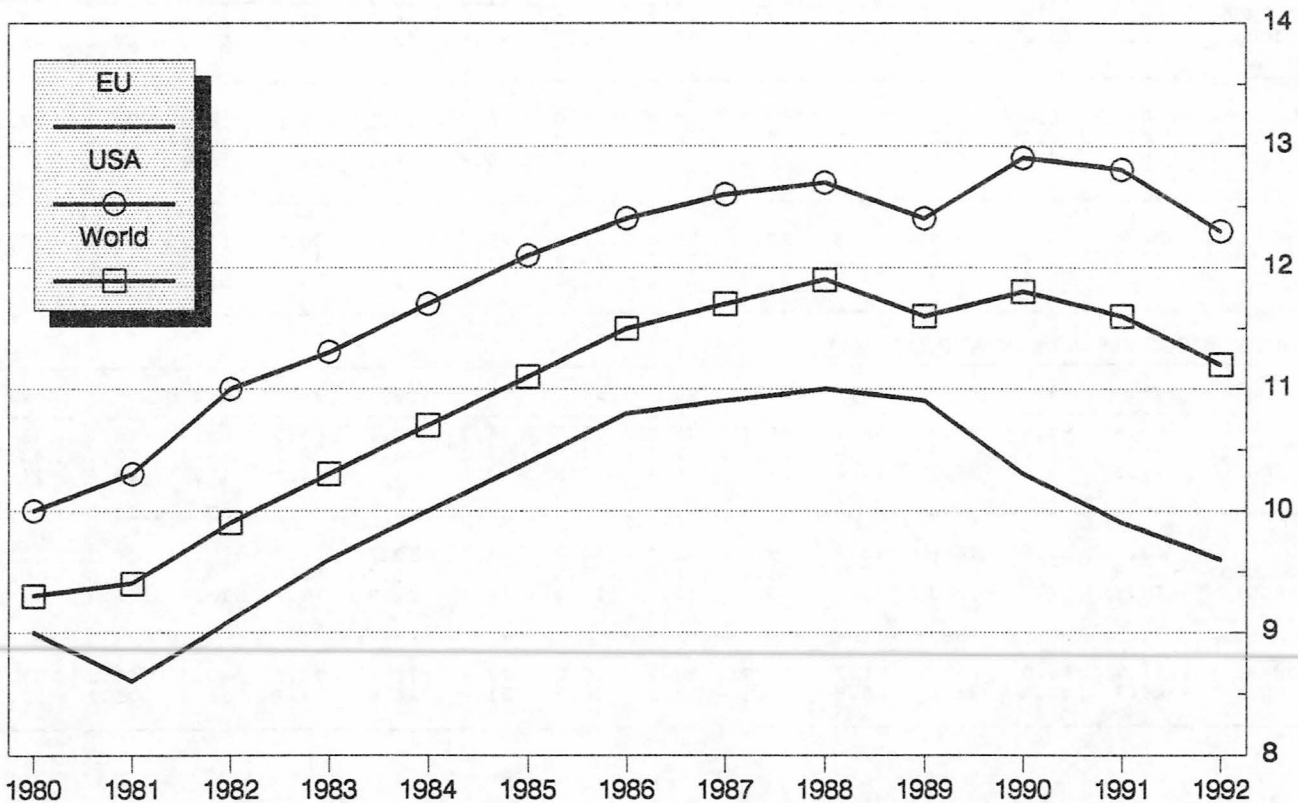
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
S-M HAUL	86.5	84.4	83.4	86.4	90.1	88.0	85.3	86.3	87.7	84.3	83.3	83.2	85.1
... NARROW BODY	48.7	51.8	57.2	68.6	78.4	79.4	74.5	77.2	74.6	70.2	65.5	63.7	63.2
... WIDE BODY	37.8	32.6	26.3	17.8	11.7	8.6	10.8	9.1	13.0	14.1	17.8	19.5	21.9
LONG HAUL	13.5	15.6	16.6	13.6	9.9	12.0	14.7	13.7	12.3	15.7	16.7	16.8	14.9
... NARROW BODY	2.9	2.7	4.3	2.5	1.4	1.3	1.3	0.9	0.4	0.6	0.2	0.0	0.0
... WIDE BODY	10.5	12.9	12.3	11.1	8.4	10.7	13.4	12.7	11.9	15.1	16.5	16.8	14.8
ALL NARROW BODY	51.7	54.5	61.4	71.2	79.9	80.7	75.8	78.1	75.1	70.8	65.7	63.8	63.3
... WIDE BODY	48.3	45.5	38.6	28.8	20.1	19.3	24.2	21.9	24.9	29.2	34.3	36.2	36.7

■ SOURCE: BOEING WORLD JET AIRPLANE INVENTORY YEAR-END 1992 / MANUFACTURERS-PRESS: 1993

CIVIL AIRCRAFT FLEET AGE

According to Seats

Years



■ SOURCE: AEROSPATIALE

CIVIL AIRCRAFT FLEET AGE (IN YEARS - AT YEAR-END)

ACCORDING TO NUMBER OF AIRCRAFT

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
BELGIUM	9.1	9.1	9.8	11.1	10.6	11.1	11.5	11.5	12.5	11.5	11.7	10.8	9.9
DENMARK	10.1	8.5	9.3	10.1	10.8	10.9	10.4	9.9	11.4	11.6	12.1	10.3	10.7
FRG	8.3	6.7	6.9	7.6	8.0	8.2	8.6	7.9	8.2	7.7	7.0	6.7	6.7
SPAIN	8.1	8.5	9.2	10.1	10.8	11.5	12.5	13.2	12.3	12.6	12.3	10.9	9.9
FRANCE	10.5	10.6	11.0	11.6	12.4	13.1	13.6	13.8	13.7	13.5	13.3	11.9	12.3
GREECE	9.8	8.3	8.5	9.3	9.3	9.6	10.6	11.7	12.5	13.5	12.0	12.3	12.1
IRELAND	12.3	12.4	13.7	13.2	13.0	13.6	13.8	11.0	13.2	12.9	13.2	10.6	10.4
ITALY	9.7	9.1	10.1	10.9	11.6	11.1	10.4	10.2	10.2	10.6	10.7	10.5	10.2
LUXEMBOURG	10.0	10.7	12.4	13.6	12.1	13.6	13.7	11.2	13.0	10.7	10.3	11.0	8.7
NETHERLANDS	10.5	10.9	11.1	11.0	11.3	11.4	10.9	10.8	11.1	9.5	8.5	7.9	8.1
PORTUGAL	8.6	9.4	10.1	8.6	9.4	10.6	11.5	11.6	11.4	10.5	9.6	9.8	9.9
UK	10.7	10.4	10.8	11.0	11.5	11.5	11.9	11.7	11.4	11.4	10.8	10.9	10.2
TOTAL EU	9.8	9.5	10.0	10.5	11.0	11.3	11.7	11.5	11.5	11.3	10.9	10.3	9.9
REST OF EUROPE	9.2	9.0	9.6	10.0	10.6	10.8	10.6	10.7	10.6	10.1	9.7	8.9	8.7
USA	10.2	10.3	10.9	11.2	11.3	11.5	11.7	11.7	11.8	11.4	11.9	11.6	11.5
REST OF THE WORLD	9.3	9.5	9.8	10.2	10.7	11.2	11.6	12.0	12.2	11.9	12.2	12.1	12.0
WORLD	9.7	9.8	10.3	10.6	11.0	11.3	11.6	11.7	11.8	11.5	11.7	11.4	11.3

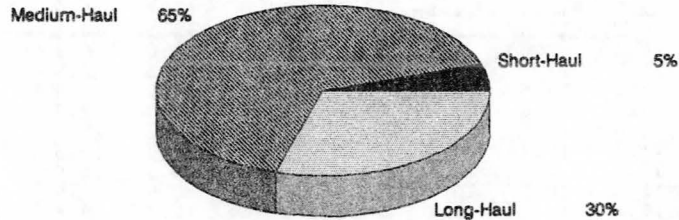
ACCORDING TO NUMBER OF SEATS

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
BELGIUM	9.5	9.5	10.1	11.2	10.6	11.0	11.1	11.0	12.0	11.5	11.6	10.6	10.3
DENMARK	10.8	9.7	10.0	11.4	12.8	12.6	11.3	10.4	11.5	10.6	10.3	8.2	9.1
FRG	7.2	6.2	6.6	7.4	8.0	8.2	8.5	8.1	8.7	8.1	7.2	7.1	7.1
SPAIN	8.9	8.8	9.4	10.3	11.0	11.7	12.9	12.8	11.8	12.5	11.5	10.1	9.9
FRANCE	9.0	8.8	9.0	9.7	10.5	11.4	11.6	12.5	12.5	12.7	12.5	11.4	11.4
GREECE	10.0	8.6	8.8	9.7	9.8	10.2	11.0	12.1	12.8	13.8	13.4	13.2	13.1
IRELAND	12.7	12.8	14.0	14.5	15.0	15.9	16.0	12.9	15.8	15.5	14.7	12.8	12.9
ITALY	8.4	7.0	7.8	8.4	9.0	8.5	8.7	9.1	9.6	10.0	10.3	10.3	10.0
LUXEMBOURG	6.9	7.2	9.5	11.2	6.3	7.4	12.5	9.8	13.5	12.2	11.7	14.0	12.6
NETHERLANDS	8.6	9.0	9.5	9.3	9.6	10.0	9.9	10.1	10.4	8.7	8.2	8.1	8.1
PORTUGAL	11.0	11.5	11.8	8.9	9.3	10.3	11.3	11.1	9.1	8.0	6.7	6.7	7.0
UK	9.6	9.4	10.1	10.2	10.6	10.6	11.3	11.3	11.0	11.1	10.3	10.4	9.6
TOTAL EU	9.0	8.6	9.1	9.6	10.0	10.4	10.8	10.9	11.0	10.9	10.3	9.9	9.6
REST OF EUROPE	9.1	8.8	9.6	9.8	10.1	10.5	10.4	10.6	10.6	9.9	9.4	8.4	8.0
USA	10.0	10.3	11.0	11.3	11.7	12.1	12.4	12.6	12.7	12.4	12.9	12.8	12.3
REST OF THE WORLD	8.6	8.8	9.0	9.5	10.0	10.4	10.7	11.2	11.4	11.2	11.4	11.3	11.1
WORLD	9.3	9.4	9.9	10.3	10.7	11.1	11.5	11.7	11.9	11.6	11.8	11.6	11.2

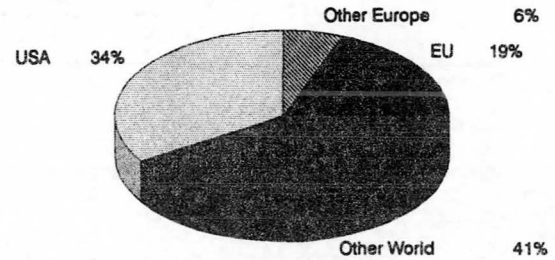
■ SOURCE: AEROSPATIALE

CIVIL AIRCRAFT IN SERVICE

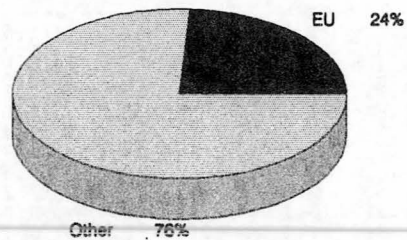
(IN VALUE - 1992)



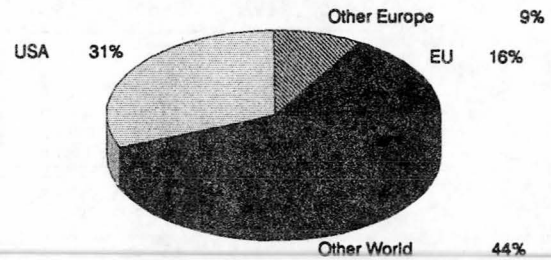
BREAKDOWN BY OPERATIONAL POSSIBILITY



GLOBAL GEOGRAPHICAL BREAKDOWN



GLOBAL MARKET SHARE OF EU-BUILT AIRCRAFT



GEOGRAPHICAL BREAKDOWN OF EU-BUILT AIRCRAFT

■ SOURCE: AEROSPATIALE

SHORT HAUL AIRCRAFT IN SERVICE (AT YEAR-END)

ABSOLUTE TOTAL FIGURES (INCLUDING GEOGRAPHICAL BREAKDOWN)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	18.0%	18.0%	17.7%	16.9%	16.3%	15.8%	14.7%	15.3%	17.0%	16.3%	16.6%	14.1%
REST OF EUROPE	3.3%	3.2%	3.3%	3.8%	3.9%	4.3%	4.5%	4.5%	4.5%	4.2%	4.2%	4.4%
USA	26.2%	27.6%	29.7%	31.8%	33.6%	35.6%	36.1%	36.1%	36.2%	35.3%	35.5%	35.5%
OTHER WORLD	52.5%	51.2%	49.3%	47.5%	46.1%	44.3%	44.7%	44.1%	42.3%	44.3%	43.7%	46.0%
TOTAL	2,716	2,870	2,997	3,135	3,367	3,656	4,035	4,398	4,712	5,567	6,015	5,698

SEATS (X 1,000)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	18.5%	18.3%	18.3%	17.8%	17.1%	16.6%	16.2%	17.5%	18.8%	17.9%	18.4%	16.5%
REST OF EUROPE	2.8%	2.8%	3.0%	3.6%	3.9%	4.3%	4.6%	4.6%	4.7%	4.6%	4.9%	5.1%
USA	25.3%	26.9%	28.3%	29.4%	31.2%	33.6%	33.8%	33.5%	33.7%	32.6%	33.1%	33.2%
OTHER WORLD	53.4%	52.0%	50.3%	49.1%	47.8%	45.6%	45.4%	44.3%	42.9%	45.0%	43.5%	45.2%
TOTAL	90	94	96	99	106	116	126	137	147	175	187	180

CONSTANT VALUE - MIO 1992 ECU

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	16.7%	16.1%	15.7%	15.0%	13.9%	13.7%	14.4%	15.5%	17.5%	17.1%	18.7%	17.3%
REST OF EUROPE	2.9%	3.0%	3.2%	3.7%	4.3%	5.3%	5.8%	5.8%	5.9%	6.4%	6.7%	7.2%
USA	26.6%	28.5%	30.8%	33.6%	37.2%	40.1%	40.7%	41.0%	40.5%	40.4%	40.0%	39.2%
OTHER WORLD	53.7%	52.5%	50.2%	47.6%	44.7%	40.5%	39.2%	37.6%	36.1%	36.1%	34.5%	36.2%
TOTAL	6,537	7,564	8,296	9,470	10,346	9,231	9,186	10,681	13,432	14,739	17,008	15,646

■ SOURCE: AEROSPATIALE

SHORT HAUL AIRCRAFT IN SERVICE (AT YEAR-END)

MARKET SHARE OF EU-BUILT AIRCRAFT BY AREA (AS % OF TOTAL)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	78.2	77.7	79.1	81.7	80.0	78.6	73.2	72.2	74.4	80.2	77.8	78.9
REST OF EUROPE	38.2	34.1	33.3	42.9	49.2	55.4	59.3	60.4	63.2	66.4	70.9	68.4
USA	23.5	25.6	25.8	28.0	32.7	32.6	34.8	37.7	38.7	42.7	41.0	47.4
OTHER WORLD	47.6	46.9	48.3	49.5	49.7	48.8	49.2	48.9	45.3	48.8	45.5	46.5
TOTAL	46.5	46.1	46.6	47.8	48.9	48.0	48.0	48.9	48.6	52.5	50.3	52.3

SEATS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	85.6	85.5	85.8	87.6	86.2	83.9	79.9	78.7	79.8	84.7	83.7	84.8
REST OF EUROPE	52.0	46.2	44.8	52.8	61.0	64.0	69.0	69.8	72.5	74.1	78.0	77.2
USA	28.5	31.7	30.5	33.6	37.8	36.4	38.6	41.0	42.2	47.7	46.7	51.1
OTHER WORLD	62.4	61.7	62.4	62.7	62.7	60.9	59.9	59.5	56.4	57.9	55.0	56.3
TOTAL	57.9	57.5	57.2	58.2	58.9	56.6	56.3	57.1	56.8	60.1	58.7	60.3

VALUE

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	72.4	71.9	73.1	75.6	73.9	75.0	71.3	72.5	74.3	81.6	81.4	84.4
REST OF EUROPE	29.4	22.2	21.1	36.4	51.9	59.0	67.3	70.0	74.4	78.6	81.8	81.6
USA	21.8	23.5	27.3	31.7	40.7	43.7	47.2	51.1	49.4	50.7	50.9	56.2
OTHER WORLD	53.3	53.4	55.7	56.3	56.0	55.7	55.1	55.9	52.9	56.8	52.1	55.1
TOTAL	47.4	46.8	48.5	50.2	52.4	53.6	54.9	57.3	56.5	60.0	59.1	62.5

■ SOURCE: AEROSPATIALE

SHORT HAUL AIRCRAFT IN SERVICE (AT YEAR-END)

GEOGRAPHICAL BREAKDOWN OF EU-BUILT AIRCRAFT (%)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	30.3	30.3	30.1	28.8	26.7	25.9	22.4	22.6	26.0	24.8	25.7	21.2
REST OF EUROPE	2.7	2.3	2.4	3.4	3.9	5.0	5.6	5.5	5.8	5.3	5.9	5.7
USA	13.2	15.3	16.5	18.6	22.5	24.1	26.2	27.8	28.8	28.7	28.9	32.1
OTHER WORLD	53.8	52.0	51.1	49.2	46.9	45.0	45.8	44.1	39.4	41.2	39.5	40.9

SEATS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	27.4	27.3	27.5	26.8	25.0	24.6	23.0	24.2	26.5	25.2	26.3	23.2
REST OF EUROPE	2.5	2.2	2.4	3.3	4.0	4.9	5.6	5.6	6.0	5.7	6.5	6.5
USA	12.5	14.8	15.1	17.0	20.0	21.6	23.2	24.0	25.0	25.8	26.3	28.1
OTHER WORLD	57.7	55.8	54.9	52.9	51.0	49.1	48.3	46.2	42.6	43.3	40.8	42.2

VALUE

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	25.5	24.7	23.6	22.5	19.5	19.2	18.7	19.6	23.1	23.2	25.8	23.4
REST OF EUROPE	1.8	1.4	1.4	2.6	4.2	5.9	7.1	7.1	7.8	8.4	9.3	9.5
USA	12.2	14.3	17.4	21.2	28.8	32.7	35.1	36.5	35.5	34.2	34.5	35.3
OTHER WORLD	60.4	59.9	57.6	53.3	47.7	42.2	39.4	36.7	33.7	34.2	30.4	31.9

■ SOURCE: AEROSPATIALE

MEDIUM HAUL AIRCRAFT IN SERVICE (AT YEAR-END)

ABSOLUTE TOTAL FIGURES (INCLUDING GEOGRAPHICAL BREAKDOWN)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	16.5%	16.2%	15.6%	15.4%	14.8%	15.1%	15.4%	16.1%	17.5%	17.6%	17.9%	16.5%
REST OF EUROPE	5.1%	4.8%	4.5%	4.2%	4.4%	4.5%	4.7%	4.6%	5.0%	4.9%	4.8%	5.1%
USA	48.2%	48.4%	50.4%	51.6%	52.7%	52.5%	52.5%	52.3%	49.8%	50.3%	49.3%	49.0%
OTHER WORLD	30.3%	30.5%	29.5%	28.7%	28.1%	28.0%	27.5%	27.0%	27.7%	27.2%	28.0%	29.5%
TOTAL	4,770	4,935	5,213	5,437	5,731	5,994	6,420	6,968	7,040	7,711	8,485	8,585

SEATS (X 1,000)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	15.7%	15.4%	14.8%	14.8%	14.4%	14.6%	14.9%	15.4%	17.1%	17.1%	17.5%	16.2%
REST OF EUROPE	4.1%	3.8%	3.7%	3.5%	3.6%	3.7%	3.9%	4.0%	4.4%	4.4%	4.4%	4.7%
USA	50.0%	49.9%	51.4%	52.1%	53.0%	52.5%	52.5%	52.4%	49.8%	50.0%	49.1%	48.7%
OTHER WORLD	30.2%	30.9%	30.1%	29.6%	29.1%	29.1%	28.7%	28.2%	28.6%	28.5%	29.1%	30.5%
TOTAL	674	703	748	783	828	868	933	1,016	1,018	1,127	1,249	1,273

CONSTANT VALUE - MIO 1992 ECU

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	16.5%	16.2%	15.8%	15.8%	15.5%	15.6%	16.4%	17.2%	18.4%	20.3%	21.4%	19.6%
REST OF EUROPE	4.3%	3.9%	3.8%	3.6%	3.9%	4.2%	4.5%	4.7%	5.2%	5.4%	5.5%	5.8%
USA	47.0%	46.0%	47.1%	47.5%	48.1%	47.4%	48.0%	47.9%	46.2%	43.8%	42.6%	43.4%
OTHER WORLD	32.2%	33.9%	33.3%	33.1%	32.5%	32.7%	31.2%	30.2%	30.2%	30.4%	30.5%	31.2%
TOTAL	87,111	99,583	112,905	128,521	136,354	115,526	104,474	107,804	126,747	122,840	142,129	144,596

■ SOURCE: AEROSPATIALE

MEDIUM HAUL AIRCRAFT IN SERVICE (AT YEAR-END)

MARKET SHARE OF EU-BUILT AIRCRAFT BY AREA (AS % OF TOTAL)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	36.7	34.6	34.4	34.6	33.2	32.0	31.1	30.4	31.3	33.2	32.4	30.3
REST OF EUROPE	19.1	18.0	20.0	20.8	22.3	22.5	19.7	21.7	19.7	19.3	18.5	21.4
USA	4.1	4.4	4.5	5.1	6.2	7.1	6.9	6.8	8.1	7.1	7.1	8.1
OTHER WORLD	21.9	23.7	24.6	25.5	25.4	26.8	26.9	27.3	30.5	28.5	30.8	31.5
TOTAL	15.6	15.8	15.8	16.2	16.3	17.1	16.7	16.8	19.0	18.1	18.8	19.3

SEATS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	37.9	36.7	36.5	37.3	36.0	34.7	33.5	32.7	33.8	35.0	35.5	34.2
REST OF EUROPE	17.0	13.8	18.3	19.6	21.7	21.8	19.2	20.9	18.6	17.3	17.3	20.7
USA	3.9	4.3	4.4	4.8	5.8	6.6	6.4	6.7	8.0	6.9	6.9	7.8
OTHER WORLD	20.3	23.4	24.4	25.9	26.4	28.1	28.1	28.6	32.7	29.9	32.0	32.9
TOTAL	14.7	15.5	15.7	16.4	16.7	17.5	17.2	17.5	20.0	18.7	19.6	20.3

VALUE

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	35.3	35.6	35.1	36.9	35.4	33.8	31.0	29.3	30.8	33.8	35.8	33.9
REST OF EUROPE	17.5	12.7	20.6	21.2	23.8	24.5	20.9	23.1	21.2	17.9	17.4	22.0
USA	4.2	4.5	4.9	5.7	7.6	9.1	8.9	9.9	11.3	10.9	10.8	12.3
OTHER WORLD	21.3	25.3	27.2	29.7	30.3	32.5	32.6	32.8	36.7	35.4	38.6	39.5
TOTAL	15.4	16.9	17.7	19.1	19.9	21.3	20.5	20.8	23.1	23.4	25.0	25.6

■ SOURCE: AEROSPATIALE

MEDIUM HAUL AIRCRAFT IN SERVICE (AT YEAR-END)

GEOGRAPHICAL BREAKDOWN OF EU-BUILT AIRCRAFT (%)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	38.7	35.3	34.0	33.1	30.1	28.3	28.6	29.1	28.9	32.2	30.8	25.8
REST OF EUROPE	6.2	5.5	5.7	5.5	6.0	6.0	5.5	6.0	5.2	5.2	4.8	5.6
USA	12.8	13.4	14.2	16.4	20.1	21.9	21.6	21.1	21.3	19.8	18.6	20.5
OTHER WORLD	42.4	45.7	46.1	45.1	43.8	43.9	44.2	43.9	44.6	42.8	45.8	48.1

SEATS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	40.4	36.4	34.5	33.7	31.0	29.0	29.1	28.9	28.9	31.9	31.6	27.3
REST OF EUROPE	4.7	3.4	4.3	4.1	4.7	4.7	4.4	4.8	4.1	4.1	3.9	4.8
USA	13.3	13.7	14.3	15.4	18.4	19.6	19.6	20.1	20.1	18.5	17.2	18.6
OTHER WORLD	41.5	46.5	46.9	46.8	46.0	46.7	46.9	46.2	46.9	45.5	47.3	49.4

VALUE

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	37.8	34.1	31.4	30.5	27.6	24.8	24.8	24.3	24.5	29.4	30.6	26.0
REST OF EUROPE	4.9	2.9	4.5	4.0	4.7	4.9	4.6	5.2	4.8	4.1	3.8	5.0
USA	12.8	12.3	13.0	14.0	18.4	20.4	20.9	22.8	22.6	20.4	18.5	20.9
OTHER WORLD	44.6	50.7	51.2	51.3	49.4	49.9	49.7	47.7	48.1	46.0	47.0	48.2

■ SOURCE: AEROSPATIALE

LONG HAUL AIRCRAFT IN SERVICE (AT YEAR-END)

ABSOLUTE TOTAL FIGURES (INCLUDING GEOGRAPHICAL BREAKDOWN)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	20.3%	19.9%	19.4%	18.7%	19.3%	19.9%	19.8%	18.7%	19.7%	18.7%	19.5%	18.5%
REST OF EUROPE	3.8%	3.7%	4.0%	4.0%	4.4%	4.3%	4.1%	4.1%	3.0%	2.0%	1.9%	1.6%
USA	29.9%	29.4%	29.5%	28.9%	28.8%	28.2%	29.3%	30.0%	31.5%	36.3%	35.2%	36.5%
OTHER WORLD	46.1%	46.9%	47.2%	48.3%	47.6%	47.6%	46.8%	47.2%	45.7%	43.0%	43.3%	43.5%
TOTAL	1,593	1,555	1,560	1,543	1,558	1,591	1,650	1,695	1,775	1,960	2,015	2,016

SEATS (X 1,000)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	21.5%	21.4%	20.9%	20.3%	21.0%	21.9%	21.8%	21.0%	21.9%	21.2%	21.3%	20.5%
REST OF EUROPE	3.5%	3.3%	3.7%	3.6%	3.8%	3.7%	3.6%	3.5%	2.5%	1.8%	1.8%	1.5%
USA	29.7%	28.9%	29.1%	28.9%	28.7%	27.6%	28.5%	28.8%	29.3%	33.6%	32.5%	32.6%
OTHER WORLD	45.2%	46.4%	46.3%	47.2%	46.6%	46.7%	46.2%	46.8%	46.2%	43.4%	44.4%	45.5%
TOTAL	405	402	411	411	420	433	450	467	499	551	577	596

CONSTANT VALUE - MIO 1992 ECU

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	24.1%	24.1%	23.4%	22.9%	24.0%	25.1%	25.4%	24.6%	26.1%	25.7%	25.1%	23.8%
REST OF EUROPE	3.6%	3.3%	3.7%	3.8%	3.8%	3.6%	3.5%	3.3%	2.5%	1.9%	2.5%	2.2%
USA	24.5%	22.6%	23.1%	22.7%	21.3%	20.0%	18.7%	17.4%	16.2%	22.2%	20.8%	21.8%
OTHER WORLD	47.8%	50.1%	49.8%	50.6%	50.9%	51.3%	52.4%	54.6%	55.2%	50.2%	51.6%	52.2%
TOTAL	60,884	65,242	69,553	73,778	73,171	58,825	49,542	47,697	52,634	52,687	57,421	62,068

■ SOURCE: AEROSPATIALE

LONG HAUL AIRCRAFT IN SERVICE (AT YEAR-END)

MARKET SHARE OF EU-BUILT AIRCRAFT BY AREA (AS % OF TOTAL)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	10.8	10.6	10.3	12.1	11.3	10.7	11.3	11.7	10.0	4.1	3.3	3.5
REST OF EUROPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER WORLD	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.0	0.0	0.0
TOTAL	2.3	2.3	2.1	2.4	2.3	2.3	2.4	2.3	2.1	0.8	0.6	0.6

SEATS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	4.4	4.2	4.0	4.7	4.2	3.9	4.2	4.2	3.6	1.3	1.1	1.1
REST OF EUROPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER WORLD	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0
TOTAL	1.0	0.9	0.9	1.0	0.9	0.9	0.9	0.9	0.8	0.3	0.2	0.2

VALUE

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	3.1	2.7	2.2	2.1	1.9	1.5	1.5	1.3	1.0	1.0	0.7	0.6
REST OF EUROPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER WORLD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.7	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.1

■ SOURCE: AEROSPATIALE

LONG HAUL AIRCRAFT IN SERVICE (AT YEAR-END)

GEOGRAPHICAL BREAKDOWN OF EU-BUILT AIRCRAFT (%)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	94.6	94.3	93.9	94.6	94.4	94.4	94.9	94.9	94.6	100.0	100.0	100.0
REST OF EUROPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER WORLD	5.4	5.7	6.1	5.4	5.6	5.6	5.1	5.1	5.4	0.0	0.0	0.0

SEATS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	95.0	94.7	94.4	97.5	94.9	94.9	97.6	97.6	95.1	100.0	100.0	100.0
REST OF EUROPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER WORLD	5.0	5.3	5.6	5.0	5.1	5.1	4.8	4.8	4.9	0.0	0.0	0.0

VALUE

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
REST OF EUROPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER WORLD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

■ SOURCE: AEROSPATIALE

TOTAL CIVIL AIRCRAFT IN SERVICE (AT YEAR-END)

ABSOLUTE TOTAL FIGURES (INCLUDING GEOGRAPHICAL BREAKDOWN)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	17.6%	17.4%	16.8%	16.4%	15.9%	16.0%	15.8%	16.2%	17.6%	17.2%	17.6%	15.9%
REST OF EUROPE	4.3%	4.1%	4.1%	4.1%	4.2%	4.4%	4.5%	4.5%	4.5%	4.3%	4.2%	4.4%
USA	38.4%	38.9%	40.7%	42.0%	43.2%	43.5%	43.8%	43.9%	42.6%	43.0%	42.6%	42.7%
OTHER WORLD	39.7%	39.6%	38.4%	37.5%	36.7%	36.0%	35.9%	35.4%	35.2%	35.5%	35.6%	37.0%
TOTAL	9,079	9,360	9,770	10,115	10,656	11,241	12,105	13,061	13,527	15,238	16,515	16,299

SEATS (X 1,000)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	18.0%	17.6%	17.1%	16.8%	16.6%	17.0%	17.1%	17.2%	18.7%	18.4%	18.7%	17.5%
REST OF EUROPE	3.8%	3.6%	3.6%	3.5%	3.7%	3.8%	3.9%	3.9%	3.9%	3.7%	3.7%	3.8%
USA	41.1%	41.0%	42.3%	43.0%	43.8%	43.3%	43.8%	44.0%	42.3%	43.5%	42.9%	42.6%
OTHER WORLD	37.2%	37.7%	37.0%	36.7%	36.0%	35.9%	35.3%	34.9%	35.2%	34.5%	34.8%	36.1%
TOTAL	1,169	1,199	1,254	1,293	1,354	1,417	1,509	1,620	1,663	1,853	2,012	2,049

CONSTANT VALUE - MIO 1992 ECU

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	19.5%	19.2%	18.5%	18.3%	18.3%	18.6%	19.0%	19.2%	20.4%	21.6%	22.2%	20.6%
REST OF EUROPE	4.0%	3.6%	3.8%	3.7%	3.9%	4.1%	4.2%	4.4%	4.5%	4.5%	4.8%	4.9%
USA	37.3%	36.4%	37.6%	38.2%	38.6%	38.3%	38.7%	38.7%	37.6%	37.6%	36.6%	37.1%
OTHER WORLD	39.3%	40.8%	40.0%	39.8%	39.2%	39.0%	38.1%	37.7%	37.4%	36.3%	36.4%	37.4%
TOTAL	154,532	172,389	190,754	211,770	219,870	183,582	163,202	166,182	192,813	190,266	216,558	222,309

■ SOURCE: AEROSPATIALE

TOTAL CIVIL AIRCRAFT IN SERVICE (AT YEAR-END)

MARKET SHARE OF EU-BUILT AIRCRAFT BY AREA (AS % OF TOTAL)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	44.2	43.7	44.4	45.7	44.5	43.2	40.8	40.9	42.6	45.3	44.1	41.5
REST OF EUROPE	20.5	19.1	20.2	24.0	26.8	29.8	30.4	32.1	33.0	34.9	36.3	36.8
USA	7.5	8.5	8.7	10.0	12.1	13.2	13.9	14.7	16.4	17.0	16.7	18.6
OTHER WORLD	27.7	28.3	29.2	29.9	30.3	30.6	31.4	31.7	31.5	33.3	32.8	33.5
TOTAL	22.5	22.9	23.1	23.9	24.6	25.0	25.2	25.7	27.1	28.4	28.1	28.5

SEATS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	27.8	27.4	27.5	28.8	27.6	26.5	26.0	26.7	27.3	28.0	28.6	27.1
REST OF EUROPE	13.5	11.5	13.9	15.8	18.1	19.3	18.9	20.4	20.7	21.5	22.3	25.1
USA	4.1	4.7	4.7	5.3	6.4	7.2	7.2	7.6	8.8	8.2	8.2	9.0
OTHER WORLD	16.5	17.9	18.4	19.2	19.6	20.4	20.6	20.9	22.4	22.2	23.0	23.5
TOTAL	13.3	13.9	14.0	14.7	15.1	15.7	15.6	16.0	17.5	17.2	17.7	18.0

VALUE

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	21.0	21.3	21.4	23.1	22.1	21.3	20.7	21.3	23.0	25.9	28.3	26.1
REST OF EUROPE	11.7	8.7	13.2	14.3	17.5	19.9	19.2	22.1	22.9	22.5	22.0	25.5
USA	3.6	4.1	4.6	5.5	7.7	9.4	9.9	11.4	12.8	12.4	12.7	13.5
OTHER WORLD	12.9	15.2	16.4	18.0	18.6	20.0	20.3	20.7	23.0	23.5	25.1	25.2
TOTAL	11.0	12.1	12.8	14.0	15.0	16.2	16.3	17.3	19.2	19.8	21.1	21.1

■ SOURCE: AEROSPATIALE

TOTAL CIVIL AIRCRAFT IN SERVICE (AT YEAR-END)

GEOGRAPHICAL BREAKDOWN OF EU-BUILT AIRCRAFT (%)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	34.5	33.2	32.5	31.4	28.8	27.6	25.5	25.7	27.7	27.5	27.7	23.1
REST OF EUROPE	3.9	3.5	3.6	4.1	4.6	5.3	5.5	5.6	5.5	5.2	5.5	5.7
USA	12.8	14.4	15.4	17.5	21.3	23.0	24.2	25.1	25.8	25.7	25.3	27.9
OTHER WORLD	48.8	49.0	48.6	47.0	45.2	44.1	44.7	43.6	41.0	41.5	41.6	43.4

SEATS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	37.5	34.8	33.5	32.9	30.4	28.9	28.5	28.6	29.1	30.0	30.2	26.3
REST OF EUROPE	3.9	2.9	3.6	3.8	4.4	4.6	4.7	5.0	4.6	4.6	4.7	5.3
USA	12.7	13.8	14.3	15.5	18.5	19.9	20.3	20.9	21.2	20.9	20.0	21.3
OTHER WORLD	46.0	48.6	48.6	47.8	46.7	46.7	46.6	45.6	45.1	44.5	45.2	47.1

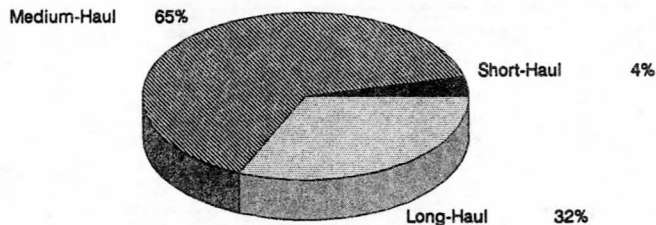
VALUE

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	37.3	33.8	31.1	30.1	27.0	24.4	24.2	23.7	24.5	28.2	29.7	25.6
REST OF EUROPE	4.2	2.6	3.9	3.8	4.5	5.0	5.0	5.6	5.4	5.1	5.0	5.9
USA	12.3	12.4	13.5	15.0	19.9	22.3	23.4	25.6	25.2	23.6	21.9	23.8
OTHER WORLD	46.3	51.2	51.5	51.0	48.6	48.3	47.4	45.1	45.0	43.1	43.3	44.7

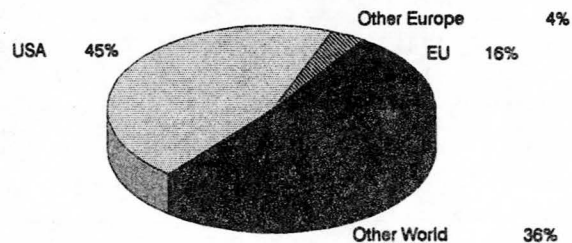
■ SOURCE: AEROSPATIALE

CIVIL AIRCRAFT DELIVERIES

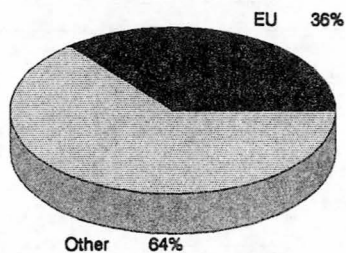
(IN VALUE - 1992)



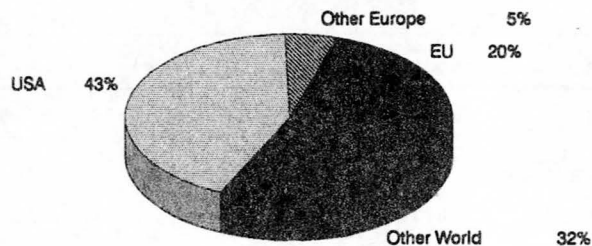
BREAKDOWN BY OPERATIONAL POSSIBILITY



GLOBAL GEOGRAPHICAL BREAKDOWN



GLOBAL MARKET SHARE OF EU-BUILT AIRCRAFT



GEOGRAPHICAL BREAKDOWN OF EU-BUILT AIRCRAFT

■ SOURCE: AEROSPATIALE

SHORT HAUL AIRCRAFT ANNUAL DELIVERIES

ABSOLUTE TOTAL FIGURES (INCLUDING GEOGRAPHICAL BREAKDOWN)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	13.7%	15.9%	11.9%	11.9%	7.8%	11.0%	18.8%	15.6%	16.9%	17.3%	21.5%	15.6%
REST OF EUROPE	5.1%	3.3%	3.8%	5.5%	5.3%	6.0%	4.4%	4.5%	5.6%	8.2%	4.8%	6.2%
USA	41.0%	37.4%	48.6%	57.4%	66.5%	66.3%	54.1%	47.8%	38.7%	48.2%	53.3%	50.2%
OTHER WORLD	40.2%	43.4%	35.7%	25.1%	20.3%	16.7%	22.8%	32.2%	38.7%	26.3%	20.4%	28.0%
TOTAL	256	182	185	235	281	282	320	379	431	463	437	275

SEATS (X 1,000)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	16.7%	14.3%	10.4%	13.3%	7.7%	12.8%	21.4%	20.2%	21.5%	19.4%	27.8%	19.4%
REST OF EUROPE	3.0%	2.0%	8.3%	6.7%	5.1%	7.0%	5.1%	5.0%	6.9%	11.0%	5.3%	8.7%
USA	39.4%	34.7%	43.7%	48.3%	64.1%	61.6%	49.0%	42.9%	34.0%	41.3%	46.4%	43.7%
OTHER WORLD	40.9%	46.9%	39.6%	28.3%	23.1%	17.4%	23.5%	31.9%	37.5%	27.1%	19.9%	28.2%
TOTAL	7	5	5	6	8	9	10	12	14	16	15	10

CONSTANT VALUE - MIO 1992 ECU

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	15.4%	15.2%	11.9%	14.6%	8.5%	12.0%	20.7%	19.9%	21.2%	20.9%	27.0%	19.5%
REST OF EUROPE	4.4%	1.5%	6.0%	6.1%	6.6%	8.0%	5.3%	5.5%	7.2%	10.9%	6.2%	8.3%
USA	38.5%	34.8%	43.3%	50.0%	63.2%	61.6%	49.3%	41.8%	34.2%	41.2%	46.0%	43.2%
OTHER WORLD	40.7%	47.0%	37.3%	29.3%	21.7%	17.6%	25.3%	31.8%	37.4%	27.9%	20.5%	29.0%
TOTAL	1,013	838	936	1,292	1,727	1,581	1,627	2,082	2,846	2,778	2,807	1,857

■ SOURCE: AEROSPATIALE

SHORT HAUL AIRCRAFT ANNUAL DELIVERIES

MARKET SHARE OF EU-BUILT AIRCRAFT BY AREA (AS % OF TOTAL)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	40.0	58.6	90.9	92.9	86.4	77.4	73.3	69.5	75.3	72.5	77.7	83.7
REST OF EUROPE	23.1	0.0	28.6	84.6	93.3	88.2	85.7	88.2	83.3	92.1	76.2	82.4
USA	19.0	14.7	40.0	34.1	55.1	51.3	53.2	54.7	36.5	50.2	50.6	60.1
OTHER WORLD	52.4	49.4	87.9	74.6	52.6	48.9	45.2	55.7	40.1	49.2	33.7	53.2
TOTAL	35.5	36.3	62.7	54.0	59.1	56.0	56.6	58.8	47.1	57.2	54.2	63.3

SEATS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	45.5	57.1	100.0	100.0	100.0	81.8	76.2	75.0	80.6	80.0	83.3	90.0
REST OF EUROPE	0.0	0.0	25.0	75.0	100.0	100.0	80.0	100.0	90.0	94.1	87.5	88.9
USA	19.2	17.6	47.6	44.8	62.0	54.7	56.3	60.8	40.8	54.7	60.0	66.7
OTHER WORLD	59.3	56.5	89.5	64.7	55.6	53.3	47.8	63.2	46.3	54.8	43.3	65.5
TOTAL	40.9	42.9	68.7	60.0	65.4	60.5	59.2	65.5	54.9	63.9	64.2	72.8

VALUE

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	50.0	60.0	87.5	91.7	88.9	86.7	77.4	77.5	81.4	78.3	85.7	89.4
REST OF EUROPE	0.0	0.0	25.0	80.0	85.7	90.0	87.5	90.9	85.0	91.7	81.0	90.0
USA	20.0	17.4	48.3	43.9	62.7	55.8	56.8	60.7	41.1	54.4	60.0	66.3
OTHER WORLD	59.5	58.1	92.0	66.7	56.5	50.0	44.7	60.9	47.1	55.4	42.0	65.7
TOTAL	40.7	42.4	68.7	59.8	65.1	60.8	60.0	65.7	54.7	63.9	64.7	72.6

■ SOURCE: AEROSPATIALE

SHORT HAUL AIRCRAFT ANNUAL DELIVERIES

GEOGRAPHICAL BREAKDOWN OF EU-BUILT AIRCRAFT (%)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	15.4	25.8	17.2	20.5	11.4	15.2	24.3	18.4	27.1	21.9	30.8	20.7
REST OF EUROPE	3.3	0.0	1.7	8.7	8.4	9.5	6.6	6.7	9.9	13.2	6.8	8.0
USA	22.0	15.2	31.0	36.2	62.0	60.8	50.8	44.4	30.0	42.3	49.8	47.7
OTHER WORLD	59.3	59.1	50.0	34.6	18.1	14.6	18.2	30.5	33.0	22.6	12.7	23.6

SEATS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	18.5	19.0	15.2	22.2	11.8	17.3	27.6	23.1	31.6	24.2	36.1	24.0
REST OF EUROPE	0.0	0.0	3.0	8.3	7.8	11.5	6.9	7.7	11.4	16.2	7.2	10.7
USA	18.5	14.3	30.3	36.1	60.8	55.8	46.6	39.7	25.3	35.4	43.3	40.0
OTHER WORLD	59.3	61.9	51.5	30.6	19.6	15.4	19.0	30.8	31.6	23.2	13.4	25.3

VALUE

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	18.9	21.4	15.2	22.4	11.6	17.1	26.7	23.5	31.6	25.6	35.8	24.0
REST OF EUROPE	0.0	0.0	2.2	8.2	8.7	11.8	7.8	7.6	11.2	15.6	7.8	10.3
USA	18.9	14.3	30.4	36.7	60.9	56.6	46.7	38.6	25.7	35.1	42.7	39.4
OTHER WORLD	59.5	64.3	50.0	32.7	18.8	14.5	18.9	29.5	32.2	24.2	13.3	26.3

■ SOURCE: AEROSPATIALE

MEDIUM HAUL AIRCRAFT ANNUAL DELIVERIES

ABSOLUTE TOTAL FIGURES (INCLUDING GEOGRAPHICAL BREAKDOWN)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	22.6%	12.2%	18.7%	17.8%	15.8%	10.8%	22.0%	22.6%	26.0%	29.3%	33.0%	19.6%
REST OF EUROPE	6.8%	2.7%	3.9%	1.8%	5.6%	10.2%	6.0%	6.7%	6.9%	5.9%	6.8%	7.3%
USA	35.9%	43.9%	48.9%	49.6%	52.1%	51.1%	53.0%	51.5%	37.5%	37.9%	31.7%	39.1%
OTHER WORLD	34.8%	41.2%	28.5%	30.8%	26.5%	27.9%	19.1%	19.3%	29.6%	27.0%	28.5%	33.9%
TOTAL	368	296	305	276	355	362	419	509	624	649	785	713

SEATS (X 1,000)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	21.3%	11.1%	18.2%	18.9%	16.0%	10.5%	22.1%	20.9%	24.4%	28.1%	30.8%	18.4%
REST OF EUROPE	6.2%	1.9%	3.7%	1.8%	5.9%	9.8%	5.1%	5.8%	7.4%	5.8%	6.4%	7.1%
USA	35.6%	42.2%	48.9%	43.6%	49.6%	48.7%	51.2%	51.6%	36.7%	37.0%	32.8%	39.4%
OTHER WORLD	37.0%	45.3%	29.0%	35.4%	28.4%	31.0%	21.6%	21.7%	31.6%	28.9%	30.0%	35.3%
TOTAL	57	49	49	44	54	53	63	79	95	99	119	111

CONSTANT VALUE - MIO 1992 ECU

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	21.4%	11.1%	18.1%	18.9%	16.0%	10.6%	22.1%	20.9%	24.5%	28.1%	30.8%	18.3%
REST OF EUROPE	6.0%	2.0%	3.9%	1.9%	5.8%	9.8%	5.1%	5.9%	7.3%	5.9%	6.5%	7.1%
USA	35.5%	41.9%	49.0%	43.7%	49.6%	48.7%	51.2%	51.6%	36.6%	37.0%	32.8%	39.4%
OTHER WORLD	37.1%	45.0%	29.1%	35.5%	28.6%	30.9%	21.5%	21.7%	31.6%	28.9%	29.9%	35.3%
TOTAL	12,351	12,043	13,324	13,457	17,107	14,049	14,338	17,197	22,698	21,549	26,587	23,750

■ SOURCE: AEROSPATIALE

MEDIUM HAUL AIRCRAFT ANNUAL DELIVERIES

MARKET SHARE OF EU-BUILT AIRCRAFT BY AREA (AS % OF TOTAL)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	19.3	41.7	28.1	34.7	17.9	17.9	18.5	24.3	34.6	36.3	38.2	23.6
REST OF EUROPE	12.0	37.5	41.7	40.0	20.0	35.1	16.0	38.2	25.6	7.9	9.4	30.8
USA	7.6	5.4	6.7	10.9	20.0	18.9	8.1	10.3	20.1	13.0	15.3	28.0
OTHER WORLD	21.9	34.4	40.2	52.9	31.9	35.6	32.5	25.5	47.6	40.6	48.2	38.4
TOTAL	15.5	22.6	21.6	28.6	22.8	25.1	15.5	18.3	32.4	27.0	31.8	30.9

SEATS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	33.1	53.7	33.7	44.6	22.1	19.6	24.3	25.9	35.3	35.3	39.1	25.6
REST OF EUROPE	11.4	22.2	50.0	37.5	28.1	38.5	9.4	34.8	27.1	7.0	10.5	37.2
USA	9.4	7.3	7.9	11.0	19.5	15.4	7.4	14.9	21.6	10.9	12.9	23.7
OTHER WORLD	27.6	43.6	38.7	54.2	37.9	40.6	34.3	29.7	47.3	41.6	50.8	41.3
TOTAL	21.3	29.0	23.3	33.1	25.7	25.9	17.1	21.6	33.4	26.5	32.2	31.1

VALUE

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	32.9	53.3	33.5	44.7	22.0	20.3	24.3	25.6	35.1	35.3	39.0	25.6
REST OF EUROPE	11.9	26.3	51.4	31.3	27.9	38.5	8.8	35.7	26.7	7.3	11.2	37.2
USA	9.4	7.0	8.1	11.0	19.4	15.3	7.5	15.0	21.6	10.9	13.0	23.6
OTHER WORLD	27.5	43.8	38.8	54.1	38.0	40.8	34.2	29.4	47.1	41.6	50.8	41.1
TOTAL	21.3	29.1	23.3	33.0	25.6	26.0	17.0	21.6	33.3	26.4	32.2	31.1

■ SOURCE: AEROSPATIALE

MEDIUM HAUL AIRCRAFT ANNUAL DELIVERIES

GEOGRAPHICAL BREAKDOWN OF EU-BUILT AIRCRAFT (%)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	28.1	22.4	24.2	21.5	12.3	7.7	26.2	30.1	27.7	39.4	39.6	15.0
REST OF EUROPE	5.3	4.5	7.6	2.5	4.9	14.3	6.2	14.0	5.4	1.7	2.0	7.3
USA	17.5	10.4	15.2	19.0	45.7	38.5	27.7	29.0	23.3	18.3	15.2	35.5
OTHER WORLD	49.1	62.7	53.0	57.0	37.0	39.6	40.0	26.9	43.6	40.6	43.2	42.3

SEATS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	33.1	20.6	26.3	25.5	13.8	8.0	31.5	25.1	25.9	37.4	37.4	15.1
REST OF EUROPE	3.3	1.4	7.9	2.1	6.5	14.5	2.8	9.4	6.0	1.5	2.1	8.4
USA	15.7	10.6	16.7	14.5	37.7	29.0	22.2	35.7	23.7	15.3	13.1	29.9
OTHER WORLD	47.9	68.1	48.2	57.9	42.0	48.6	43.5	29.8	44.8	45.4	47.4	46.8

VALUE

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	33.1	20.3	26.1	25.5	13.8	8.3	31.6	24.9	25.8	37.6	37.3	15.0
REST OF EUROPE	3.4	1.8	8.6	1.8	6.3	14.5	2.7	9.8	5.8	1.6	2.2	8.4
USA	15.7	10.1	17.1	14.5	37.5	28.7	22.7	35.8	23.7	15.2	13.2	29.8
OTHER WORLD	47.9	67.8	48.6	58.2	42.4	48.4	43.1	29.6	44.7	45.6	47.3	46.7

■ SOURCE: AEROSPATIALE

LONG HAUL AIRCRAFT ANNUAL DELIVERIES

ABSOLUTE TOTAL FIGURES (INCLUDING GEOGRAPHICAL BREAKDOWN)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	24.4%	22.9%	29.0%	19.0%	25.0%	23.9%	20.6%	12.5%	26.7%	28.2%	27.0%	21.4%
REST OF EUROPE	3.5%	5.7%	12.9%	0.0%	0.0%	0.0%	2.9%	0.0%	0.0%	1.2%	8.7%	3.4%
USA	10.5%	0.0%	3.2%	14.3%	3.1%	23.9%	14.7%	15.0%	25.0%	25.9%	18.3%	23.9%
OTHER WORLD	61.6%	71.4%	54.8%	66.7%	71.9%	52.2%	61.8%	72.5%	48.3%	44.7%	46.1%	51.3%
TOTAL	86	35	31	21	32	46	34	40	60	85	115	117

SEATS (X 1,000)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	26.4%	25.8%	25.2%	12.5%	22.0%	27.0%	22.9%	13.2%	28.4%	30.2%	25.5%	21.0%
REST OF EUROPE	3.9%	4.0%	14.8%	0.0%	0.0%	0.0%	3.1%	0.0%	0.0%	0.9%	7.3%	2.8%
USA	8.1%	0.0%	3.5%	15.3%	2.5%	19.0%	14.5%	13.8%	22.0%	21.8%	14.6%	20.5%
OTHER WORLD	61.6%	70.2%	56.5%	72.2%	76.3%	54.0%	59.5%	73.0%	49.6%	47.1%	52.3%	55.7%
TOTAL	28	12	12	7	12	17	13	15	23	33	40	42

CONSTANT VALUE - MIO 1992 ECU

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	26.3%	25.8%	25.0%	12.7%	22.2%	27.2%	23.0%	13.4%	28.8%	30.3%	25.6%	21.0%
REST OF EUROPE	3.8%	4.2%	14.8%	0.0%	0.0%	0.0%	3.1%	0.0%	0.0%	0.9%	7.3%	2.7%
USA	8.2%	0.0%	3.4%	15.2%	2.2%	19.1%	14.3%	14.2%	21.8%	21.7%	14.7%	20.6%
OTHER WORLD	61.5%	70.3%	56.4%	72.7%	75.9%	53.9%	59.6%	72.4%	49.5%	47.2%	52.4%	55.7%
TOTAL	7,239	3,591	3,687	2,600	4,399	5,298	3,492	4,020	6,470	8,317	10,170	10,739

■ SOURCE: AEROSPATIALE

LONG HAUL AIRCRAFT ANNUAL DELIVERIES

MARKET SHARE OF EU-BUILT AIRCRAFT BY AREA (AS % OF TOTAL)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REST OF EUROPE	0.0	0.0	0.0	-	-	-	0.0	-	-	0.0	0.0	0.0
USA	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER WORLD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SEATS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REST OF EUROPE	0.0	0.0	0.0	-	-	-	0.0	-	-	0.0	0.0	0.0
USA	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER WORLD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

VALUE

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REST OF EUROPE	0.0	0.0	0.0	-	-	-	0.0	-	-	0.0	0.0	0.0
USA	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER WORLD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

■ SOURCE: AEROSPATIALE

LONG HAUL AIRCRAFT ANNUAL DELIVERIES

GEOGRAPHICAL BREAKDOWN OF EU-BUILT AIRCRAFT (%)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REST OF EUROPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER WORLD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SEATS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REST OF EUROPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER WORLD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

VALUE

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REST OF EUROPE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTHER WORLD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

■ SOURCE: AEROSPATIALE

TOTAL CIVIL AIRCRAFT ANNUAL DELIVERIES

ABSOLUTE TOTAL FIGURES (INCLUDING GEOGRAPHICAL BREAKDOWN)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	19.6%	14.2%	16.9%	15.2%	12.9%	11.7%	20.6%	19.3%	22.5%	24.6%	28.7%	18.8%
REST OF EUROPE	5.8%	3.1%	4.4%	3.4%	5.2%	7.8%	5.2%	5.5%	6.0%	6.4%	6.3%	6.6%
USA	34.6%	38.6%	46.1%	51.7%	55.8%	55.5%	51.7%	48.4%	37.3%	41.0%	37.6%	40.3%
OTHER WORLD	40.0%	44.1%	32.6%	29.7%	26.0%	24.9%	22.5%	26.8%	34.2%	28.0%	27.4%	34.3%
TOTAL	710	513	521	532	668	690	773	928	1,115	1,197	1,337	1,105

SEATS (X 1,000)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	22.5%	14.1%	18.9%	17.5%	16.1%	14.4%	22.2%	19.7%	24.8%	27.7%	29.4%	19.1%
REST OF EUROPE	5.2%	2.3%	6.0%	2.1%	4.9%	7.3%	4.8%	4.9%	6.0%	5.2%	6.5%	6.1%
USA	27.3%	33.7%	40.5%	40.5%	43.6%	43.6%	45.4%	45.2%	33.8%	34.1%	29.8%	34.7%
OTHER WORLD	44.9%	50.1%	34.7%	39.3%	35.6%	34.6%	27.6%	30.2%	35.4%	32.8%	34.2%	40.1%
TOTAL	92	66	65	57	73	79	86	106	132	147	173	163

CONSTANT VALUE - MIO 1992 ECU

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	22.8%	14.5%	19.2%	17.6%	16.6%	14.9%	22.1%	19.5%	25.1%	28.1%	29.2%	19.1%
REST OF EUROPE	5.2%	2.5%	6.2%	1.9%	4.8%	7.2%	4.8%	4.8%	5.8%	5.1%	6.7%	5.8%
USA	26.1%	32.4%	39.3%	39.9%	41.7%	42.2%	44.4%	44.2%	33.4%	33.5%	29.1%	34.0%
OTHER WORLD	45.8%	50.6%	35.2%	40.6%	37.0%	35.7%	28.7%	31.3%	35.7%	33.5%	35.1%	41.0%
TOTAL	20,603	16,472	17,947	17,349	23,233	20,928	19,457	23,299	32,014	32,644	39,564	36,345

■ SOURCE: AEROSPATIALE

TOTAL CIVIL AIRCRAFT ANNUAL DELIVERIES

MARKET SHARE OF EU-BUILT AIRCRAFT BY AREA (AS % OF TOTAL)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	21.6	43.8	40.9	53.1	33.7	38.3	38.4	38.5	44.2	43.2	44.8	33.2
REST OF EUROPE	14.6	18.8	30.4	72.2	51.4	51.9	40.0	54.9	46.3	49.4	25.0	41.1
USA	12.2	8.6	19.2	22.2	37.5	34.2	27.5	28.1	26.0	29.3	31.0	36.2
OTHER WORLD	28.9	35.8	54.7	56.3	34.5	34.3	33.9	37.3	40.7	39.1	37.7	35.4
TOTAL	20.8	25.9	34.9	38.7	37.0	36.1	31.8	34.1	36.3	36.8	36.4	35.7

SEATS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	21.7	35.5	28.5	45.0	21.2	17.5	26.2	29.0	32.5	29.9	35.0	22.4
REST OF EUROPE	8.3	13.3	25.6	50.0	36.1	44.8	17.1	42.3	35.0	26.0	13.3	37.4
USA	9.6	8.1	11.0	14.7	25.9	20.0	13.0	19.1	21.2	14.9	17.8	23.5
OTHER WORLD	18.0	33.0	31.9	42.4	26.1	27.4	24.4	23.4	35.6	29.3	32.7	27.5
TOTAL	16.1	24.6	22.5	31.8	25.7	24.0	19.3	23.4	29.9	24.5	27.6	25.7

VALUE

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	20.1	33.0	26.3	42.8	19.0	15.0	23.9	27.3	30.4	28.3	33.2	20.6
REST OF EUROPE	8.3	15.6	25.0	42.9	33.8	42.9	15.1	41.3	33.1	22.4	12.7	36.0
USA	9.1	7.6	10.3	13.4	24.1	18.1	11.7	18.0	20.5	13.6	16.6	22.1
OTHER WORLD	15.9	31.2	29.0	40.3	24.1	25.5	22.2	20.6	33.9	27.6	30.9	25.5
TOTAL	14.8	23.4	20.9	30.1	23.7	22.1	17.6	21.8	28.5	22.9	26.2	24.0

■ SOURCE: AEROSPATIALE

TOTAL CIVIL AIRCRAFT ANNUAL DELIVERIES

GEOGRAPHICAL BREAKDOWN OF EU-BUILT AIRCRAFT (%)

UNITS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	20.3	24.1	19.8	20.9	11.7	12.4	24.8	21.8	27.4	28.9	35.3	17.5
REST OF EUROPE	4.1	2.3	3.8	6.3	7.3	11.2	6.5	8.9	7.7	8.6	4.3	7.6
USA	20.3	12.8	25.3	29.6	56.7	52.6	44.7	39.9	26.7	32.7	32.0	40.9
OTHER WORLD	55.4	60.9	51.1	43.2	24.3	23.7	24.0	29.4	38.3	29.8	28.3	34.0

SEATS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	30.4	20.4	23.8	24.9	13.2	10.5	30.1	24.5	27.0	33.8	37.2	16.7
REST OF EUROPE	2.7	1.2	6.8	3.3	6.9	13.7	4.2	8.8	7.1	5.5	3.1	8.8
USA	16.2	11.1	19.7	18.8	43.9	36.3	30.7	36.9	24.0	20.8	19.2	31.7
OTHER WORLD	50.0	67.3	49.0	52.5	36.0	39.5	34.9	30.1	42.2	39.3	40.5	43.0

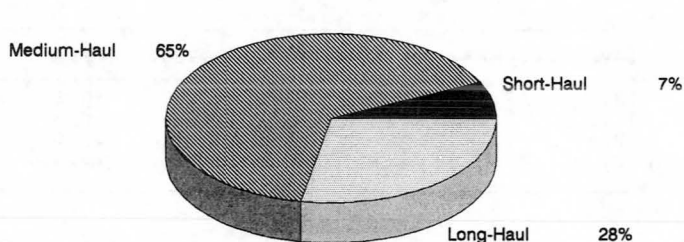
VALUE

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	31.1	20.4	24.3	25.1	13.3	10.1	30.2	24.5	26.8	34.7	37.0	16.4
REST OF EUROPE	2.9	1.6	7.5	2.7	6.8	14.0	4.1	9.2	6.7	5.0	3.2	8.7
USA	16.1	10.5	19.4	17.8	42.3	34.5	29.5	36.5	24.0	20.0	18.4	31.3
OTHER WORLD	49.5	67.4	48.9	54.4	37.6	41.4	36.2	29.6	42.5	40.5	41.3	43.6

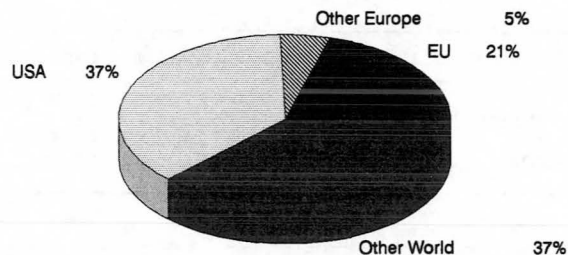
■ SOURCE: AEROSPATIALE

CIVIL AIRCRAFT ORDERS (IN BACKLOG)

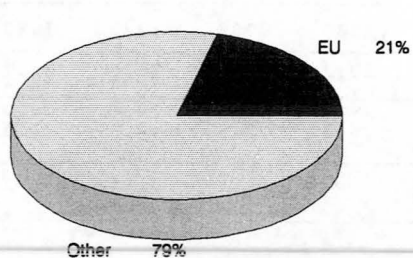
(IN VALUE - 1992)



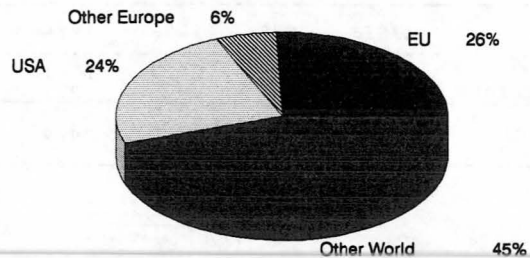
BREAKDOWN BY OPERATIONAL POSSIBILITY



GLOBAL GEOGRAPHICAL BREAKDOWN



GLOBAL MARKET SHARE OF EU-BUILT AIRCRAFT



GEOGRAPHICAL BREAKDOWN OF EU-BUILT AIRCRAFT

■ SOURCE: AEROSPATIALE

SHORT HAUL AIRCRAFT ORDERS (IN BACKLOG - AT YEAR-END)

ABSOLUTE TOTAL FIGURES (INCLUDING GEOGRAPHICAL BREAKDOWN)

UNITS

	1986	1987	1988	1989	1990	1991	1992
EU	17.4%	16.5%	21.5%	28.7%	22.3%	19.8%	11.3%
REST OF EUROPE	5.3%	4.5%	7.6%	6.5%	6.6%	5.3%	7.5%
USA	25.8%	36.3%	33.6%	37.1%	42.3%	44.1%	44.5%
OTHER WORLD	51.4%	42.6%	37.3%	27.7%	28.8%	30.8%	36.7%
TOTAL	449	509	643	773	878	916	761

SEATS (X 1,000)

	1986	1987	1988	1989	1990	1991	1992
EU	18.3%	16.8%	25.0%	32.4%	26.6%	23.5%	14.6%
REST OF EUROPE	6.7%	5.6%	8.8%	7.3%	8.4%	7.1%	9.5%
USA	23.8%	34.2%	28.8%	32.7%	37.1%	36.9%	38.0%
OTHER WORLD	51.2%	43.4%	36.9%	27.6%	27.2%	32.4%	38.0%
TOTAL	16	20	26	32	33	34	27

CONSTANT VALUE - MIO 1992 ECU

	1986	1987	1988	1989	1990	1991	1992
EU	18.8%	17.2%	24.8%	32.5%	26.6%	23.6%	14.6%
REST OF EUROPE	6.7%	5.0%	9.1%	7.4%	8.6%	7.0%	9.3%
USA	23.0%	34.0%	28.7%	32.9%	52.6%	36.9%	38.0%
OTHER WORLD	51.9%	43.6%	36.7%	27.2%	11.8%	32.5%	38.0%
TOTAL	3,022	3,286	4,548	6,215	6,044	6,280	4,946

■ SOURCE: AEROSPATIALE

SHORT HAUL AIRCRAFT ORDERS (IN BACKLOG - AT YEAR-END)

MARKET SHARE OF EU-BUILT AIRCRAFT BY AREA (AS % OF TOTAL)

UNITS

	1986	1987	1988	1989	1990	1991	1992
EU	83.3	76.2	83.3	71.6	71.4	77.9	91.9
REST OF EUROPE	100.0	95.7	93.9	100.0	89.7	83.7	64.9
USA	42.2	44.9	33.8	58.2	42.9	50.5	41.0
OTHER WORLD	54.5	69.6	64.2	66.8	72.7	78.4	88.5
TOTAL	58.8	62.9	60.3	67.1	60.9	66.3	66.0

SEATS

	1986	1987	1988	1989	1990	1991	1992
EU	90.0	84.8	87.7	79.4	79.8	82.3	95.0
REST OF EUROPE	100.0	90.9	95.7	100.0	92.9	87.5	69.2
USA	48.7	52.2	40.0	63.1	54.8	62.9	54.8
OTHER WORLD	58.3	74.1	69.8	72.4	80.2	84.4	92.3
TOTAL	64.6	69.4	67.7	73.7	71.9	76.5	76.3

VALUE

	1986	1987	1988	1989	1990	1991	1992
EU	88.9	82.7	88.1	79.7	79.6	82.6	94.7
REST OF EUROPE	100.0	100.0	95.0	100.0	91.9	88.7	71.7
USA	49.1	52.4	39.7	63.5	68.0	63.3	54.5
OTHER WORLD	58.1	74.2	69.6	72.7	54.1	84.5	92.2
TOTAL	64.9	69.3	67.7	73.8	71.6	76.5	76.3

■ SOURCE: AEROSPATIALE

SHORT HAUL AIRCRAFT ORDERS (IN BACKLOG - AT YEAR-END)

GEOGRAPHICAL BREAKDOWN OF EU-BUILT AIRCRAFT (%)

UNITS

	1986	1987	1988	1989	1990	1991	1992
EU	24.6	20.0	29.6	30.6	26.2	23.2	15.7
REST OF EUROPE	9.1	6.9	11.9	9.6	9.7	6.8	7.4
USA	18.6	25.9	18.8	32.2	29.7	33.6	27.7
OTHER WORLD	47.7	47.2	39.7	27.6	34.4	36.4	49.2

SEATS

	1986	1987	1988	1989	1990	1991	1992
EU	25.5	20.6	32.4	34.9	29.6	25.3	18.2
REST OF EUROPE	10.4	7.4	12.5	9.9	10.8	8.2	8.6
USA	17.9	25.7	17.0	28.0	28.3	30.4	27.3
OTHER WORLD	46.2	46.3	38.1	27.2	30.4	35.8	45.9

VALUE

	1986	1987	1988	1989	1990	1991	1992
EU	25.8	20.5	32.3	35.0	29.6	25.5	18.2
REST OF EUROPE	10.3	7.1	12.8	10.0	11.1	8.1	8.8
USA	17.4	25.7	16.8	28.3	50.0	30.5	27.1
OTHER WORLD	46.5	46.7	37.7	26.8	8.9	35.9	45.9

■ SOURCE: AEROSPATIALE

MEDIUM HAUL AIRCRAFT ORDERS (IN BACKLOG - AT YEAR-END)**ABSOLUTE TOTAL FIGURES (INCLUDING GEOGRAPHICAL BREAKDOWN)****UNITS**

	1986	1987	1988	1989	1990	1991	1992
EU	17.8%	21.6%	23.2%	31.0%	30.4%	25.3%	10.9%
REST OF EUROPE	5.5%	5.8%	6.3%	4.9%	5.1%	4.9%	4.7%
USA	59.6%	52.6%	52.5%	47.5%	42.8%	45.2%	58.5%
OTHER WORLD	17.1%	20.0%	17.9%	16.6%	21.7%	24.7%	25.9%
TOTAL	1,257	1,321	1,654	2,873	3,217	2,735	2,201

SEATS (X 1,000)

	1986	1987	1988	1989	1990	1991	1992
EU	17.4%	21.1%	22.3%	30.0%	29.1%	25.1%	11.6%
REST OF EUROPE	5.3%	5.2%	6.0%	4.6%	4.8%	4.5%	4.1%
USA	58.1%	51.5%	52.4%	47.5%	42.6%	43.9%	56.7%
OTHER WORLD	19.2%	22.2%	19.3%	17.9%	23.5%	26.4%	27.6%
TOTAL	181	195	252	445	519	463	387

CONSTANT VALUE - MIO 1992 ECU

	1986	1987	1988	1989	1990	1991	1992
EU	17.3%	21.0%	22.2%	30.1%	29.1%	25.2%	11.6%
REST OF EUROPE	5.2%	5.2%	6.1%	4.6%	4.8%	4.5%	4.1%
USA	58.3%	51.6%	52.5%	47.5%	42.6%	44.0%	56.7%
OTHER WORLD	19.2%	22.2%	19.2%	17.8%	23.4%	26.4%	27.6%
TOTAL	47,697	44,249	54,493	106,517	113,564	104,098	83,422

■ SOURCE: AEROSPATIALE

MEDIUM HAUL AIRCRAFT ORDERS (IN BACKLOG - AT YEAR-END)**MARKET SHARE OF EU-BUILT AIRCRAFT BY AREA (AS % OF TOTAL)****UNITS**

	1986	1987	1988	1989	1990	1991	1992
EU	39.7	38.9	11.5	28.5	42.3	38.3	51.5
REST OF EUROPE	24.6	40.3	5.7	25.5	42.9	49.6	52.9
USA	29.5	41.0	28.9	27.2	25.6	28.5	33.7
OTHER WORLD	35.8	40.5	33.8	53.6	53.4	48.7	39.8
TOTAL	32.1	40.4	24.2	31.9	37.6	37.0	38.1

SEATS

	1986	1987	1988	1989	1990	1991	1992
EU	44.6	40.9	13.4	30.9	43.9	40.7	54.0
REST OF EUROPE	24.2	38.2	6.6	27.6	46.4	53.1	53.7
USA	28.3	41.3	27.7	29.3	27.6	31.2	36.8
OTHER WORLD	36.2	43.3	36.3	58.7	56.9	52.2	42.2
TOTAL	32.4	41.5	24.9	35.0	40.1	40.1	41.0

VALUE

	1986	1987	1988	1989	1990	1991	1992
EU	43.9	40.6	13.4	30.9	43.8	40.7	54.0
REST OF EUROPE	25.0	38.0	6.9	27.4	46.4	52.9	53.7
USA	28.3	41.4	27.7	29.2	27.6	31.2	36.8
OTHER WORLD	36.1	43.4	36.4	59.0	56.8	52.2	42.2
TOTAL	32.3	41.5	25.0	35.0	40.1	40.1	41.0

■ SOURCE: AEROSPATIALE

MEDIUM HAUL AIRCRAFT ORDERS (IN BACKLOG - AT YEAR-END)**GEOGRAPHICAL BREAKDOWN OF EU-BUILT AIRCRAFT (%)****UNITS**

	1986	1987	1988	1989	1990	1991	1992
EU	22.0	20.8	11.0	27.7	34.2	26.2	14.7
REST OF EUROPE	4.2	5.8	1.5	3.9	5.8	6.5	6.6
USA	54.7	53.4	62.6	40.6	29.2	34.8	51.7
OTHER WORLD	19.1	20.0	24.9	27.8	30.8	32.5	27.1

SEATS

	1986	1987	1988	1989	1990	1991	1992
EU	23.9	20.7	12.0	26.6	31.8	25.5	15.3
REST OF EUROPE	3.9	4.8	1.6	3.6	5.6	6.0	5.4
USA	50.6	51.2	58.3	39.8	29.3	34.1	50.9
OTHER WORLD	21.5	23.2	28.1	30.1	33.3	34.3	28.4

VALUE

	1986	1987	1988	1989	1990	1991	1992
EU	23.4	20.5	12.0	26.6	31.8	25.6	15.3
REST OF EUROPE	4.0	4.8	1.7	3.6	5.6	5.9	5.4
USA	51.1	51.4	58.3	39.7	29.3	34.2	50.9
OTHER WORLD	21.5	23.2	28.0	30.0	33.3	34.3	28.4

■ SOURCE: AEROSPATIALE

LONG HAUL AIRCRAFT ORDERS (IN BACKLOG - AT YEAR-END)

ABSOLUTE TOTAL FIGURES (INCLUDING GEOGRAPHICAL BREAKDOWN)

UNITS

	1986	1987	1988	1989	1990	1991	1992
EU	30.9%	43.0%	30.8%	32.2%	30.4%	28.9%	25.3%
REST OF EUROPE	2.0%	4.0%	5.3%	4.1%	4.5%	2.4%	1.8%
USA	12.1%	21.7%	21.4%	22.0%	22.5%	22.5%	23.0%
OTHER WORLD	55.0%	31.3%	42.5%	41.6%	42.5%	46.3%	49.9%
TOTAL	149	300	310	459	595	547	435

SEATS (X 1,000)

	1986	1987	1988	1989	1990	1991	1992
EU	32.5%	42.0%	31.5%	31.1%	28.9%	27.4%	23.9%
REST OF EUROPE	1.1%	3.3%	4.2%	3.5%	3.7%	1.9%	1.4%
USA	12.7%	20.0%	19.5%	20.8%	21.4%	21.3%	21.9%
OTHER WORLD	53.5%	34.7%	44.8%	44.7%	46.1%	49.3%	52.7%
TOTAL	54	106	116	157	205	191	161

CONSTANT VALUE - MIO 1992 ECU

	1986	1987	1988	1989	1990	1991	1992
EU	32.4%	42.2%	31.5%	31.2%	28.8%	27.4%	23.9%
REST OF EUROPE	0.7%	3.1%	4.1%	3.3%	3.8%	2.0%	1.4%
USA	12.9%	20.0%	19.5%	20.8%	21.4%	21.3%	21.9%
OTHER WORLD	53.9%	34.7%	44.9%	44.7%	46.0%	49.3%	52.7%
TOTAL	16,413	28,263	30,603	43,932	51,879	49,250	40,837

■ SOURCE: AEROSPATIALE

LONG HAUL AIRCRAFT ORDERS (IN BACKLOG - AT YEAR-END)

MARKET SHARE OF EU-BUILT AIRCRAFT BY AREA (AS % OF TOTAL)

UNITS

	1986	1987	1988	1989	1990	1991	1992
EU	0.0	33.3	17.3	30.4	26.0	31.0	41.8
REST OF EUROPE	66.7	0.0	0.0	0.0	0.0	15.4	25.0
USA	0.0	30.8	4.4	31.7	21.6	26.0	15.0
OTHER WORLD	0.0	5.3	0.0	3.7	8.7	13.0	20.3
TOTAL	1.3	22.7	6.3	18.3	16.5	21.2	24.6

SEATS

	1986	1987	1988	1989	1990	1991	1992
EU	0.0	28.4	13.7	27.4	23.4	27.7	35.4
REST OF EUROPE	33.3	0.0	0.0	0.0	0.0	13.5	26.1
USA	0.0	27.7	4.0	28.9	19.6	23.2	12.5
OTHER WORLD	0.0	4.1	0.0	3.0	6.9	10.3	15.3
TOTAL	0.4	18.9	5.1	15.8	14.1	17.9	19.7

VALUE

	1986	1987	1988	1989	1990	1991	1992
EU	0.0	28.4	13.7	27.3	23.4	27.6	35.4
REST OF EUROPE	0.0	0.0	0.0	0.0	0.0	15.5	25.0
USA	0.0	27.8	4.0	29.1	19.5	23.2	12.6
OTHER WORLD	0.0	4.0	0.0	3.0	6.9	10.4	15.3
TOTAL	0.0	18.9	5.1	15.9	14.1	17.9	19.7

■ SOURCE: AEROSPATIALE

LONG HAUL AIRCRAFT ORDERS (IN BACKLOG - AT YEAR-END)

GEOGRAPHICAL BREAKDOWN OF EU-BUILT AIRCRAFT (%)

UNITS

	1986	1987	1988	1989	1990	1991	1992
EU	0.0	63.2	85.0	53.6	48.0	42.2	43.0
REST OF EUROPE	100.0	0.0	0.0	0.0	0.0	1.7	1.9
USA	0.0	29.4	15.0	38.1	29.6	27.6	14.0
OTHER WORLD	0.0	7.4	0.0	8.3	22.4	28.4	41.1

SEATS

	1986	1987	1988	1989	1990	1991	1992
EU	0.0	63.2	84.7	53.6	48.1	42.4	43.0
REST OF EUROPE	100.0	0.0	0.0	0.0	0.0	1.5	1.9
USA	0.0	29.4	15.3	37.9	29.8	27.5	13.9
OTHER WORLD	0.0	7.5	0.0	8.5	22.5	28.4	41.1

VALUE

	1986	1987	1988	1989	1990	1991	1992
EU	0.0	63.3	85.3	53.6	48.0	42.2	43.0
REST OF EUROPE	0.0	0.0	0.0	0.0	0.0	1.7	1.8
USA	0.0	29.4	15.3	38.2	29.6	27.6	14.0
OTHER WORLD	0.0	7.3	0.0	8.4	22.5	28.5	41.1

■ SOURCE: AEROSPATIALE

TOTAL CIVIL AIRCRAFT ORDERS (IN BACKLOG - AT YEAR-END)**ABSOLUTE TOTAL FIGURES (INCLUDING GEOGRAPHICAL BREAKDOWN)****UNITS**

	1986	1987	1988	1989	1990	1991	1992
EU	18.8%	23.4%	23.7%	30.7%	28.9%	24.6%	12.8%
REST OF EUROPE	5.2%	5.3%	6.5%	5.1%	5.3%	4.6%	5.0%
USA	47.6%	44.4%	44.1%	42.7%	40.1%	42.0%	50.8%
OTHER WORLD	28.5%	27.0%	25.7%	21.5%	25.7%	28.8%	31.4%
TOTAL	1,855	2,130	2,615	4,105	4,690	4,198	3,397

SEATS (X 1,000)

	1986	1987	1988	1989	1990	1991	1992
EU	20.7%	27.7%	25.2%	30.4%	28.9%	25.7%	15.2%
REST OF EUROPE	4.5%	4.6%	5.7%	4.4%	4.7%	3.9%	3.6%
USA	46.1%	40.0%	41.2%	40.1%	36.6%	37.3%	46.1%
OTHER WORLD	28.7%	27.6%	28.0%	25.0%	29.8%	33.0%	35.1%
TOTAL	251	321	394	633	758	687	575

CONSTANT VALUE - MIO 1992 ECU

	1986	1987	1988	1989	1990	1991	1992
EU	21.1%	28.7%	25.5%	30.5%	28.9%	25.8%	15.6%
REST OF EUROPE	4.2%	4.4%	5.5%	4.3%	4.6%	3.8%	3.5%
USA	45.6%	39.0%	40.0%	39.5%	36.6%	36.7%	45.0%
OTHER WORLD	29.2%	27.8%	28.9%	25.7%	29.9%	33.7%	35.9%
TOTAL	67,133	75,799	89,643	156,663	171,486	159,629	129,204

■ SOURCE: AEROSPATIALE

TOTAL CIVIL AIRCRAFT ORDERS (IN BACKLOG - AT YEAR-END)

MARKET SHARE OF EU-BUILT AIRCRAFT BY AREA (AS % OF TOTAL)

UNITS

	1986	1987	1988	1989	1990	1991	1992
EU	44.3	43.8	28.4	36.3	44.3	44.1	57.0
REST OF EUROPE	44.8	47.3	30.4	41.0	49.2	55.9	55.6
USA	30.6	41.1	28.4	32.6	28.7	33.4	34.0
OTHER WORLD	38.4	45.7	37.9	46.0	48.0	48.2	48.6
TOTAL	36.1	43.3	30.9	37.0	39.3	41.3	42.6

SEATS

	1986	1987	1988	1989	1990	1991	1992
EU	32.1	36.3	18.4	32.6	39.8	38.7	47.7
REST OF EUROPE	32.1	33.1	14.3	28.1	40.0	50.7	52.6
USA	27.3	39.6	24.9	30.6	27.5	31.4	34.3
OTHER WORLD	24.2	30.0	22.1	34.9	36.8	36.4	33.5
TOTAL	27.6	35.7	21.9	32.2	34.4	35.7	36.7

VALUE

	1986	1987	1988	1989	1990	1991	1992
EU	29.2	35.0	17.2	32.0	38.8	37.9	46.5
REST OF EUROPE	29.4	31.0	12.5	26.4	38.0	49.6	51.8
USA	26.8	39.2	24.2	30.3	28.2	31.0	33.6
OTHER WORLD	21.6	27.2	19.2	32.3	33.5	34.5	31.7
TOTAL	25.9	34.3	20.3	31.2	33.3	34.7	35.6

■ SOURCE: AEROSPATIALE

TOTAL CIVIL AIRCRAFT ORDERS (IN BACKLOG - AT YEAR-END)

GEOGRAPHICAL BREAKDOWN OF EU-BUILT AIRCRAFT (%)

UNITS

	1986	1987	1988	1989	1990	1991	1992
EU	23.0	23.6	21.8	30.1	32.6	26.2	17.1
REST OF EUROPE	6.4	5.7	6.4	5.7	6.6	6.3	6.5
USA	40.3	42.1	40.4	37.6	29.4	33.9	40.6
OTHER WORLD	30.3	28.5	31.4	26.6	31.4	33.6	35.8

SEATS

	1986	1987	1988	1989	1990	1991	1992
EU	24.0	28.2	21.1	30.8	33.4	27.9	19.8
REST OF EUROPE	5.2	4.3	3.7	3.9	5.4	5.6	5.2
USA	45.5	44.4	46.9	38.2	29.3	32.8	43.0
OTHER WORLD	25.2	23.2	28.2	27.1	31.8	33.6	32.0

VALUE

	1986	1987	1988	1989	1990	1991	1992
EU	23.7	29.3	21.6	31.3	33.7	28.2	20.4
REST OF EUROPE	4.7	4.0	3.4	3.7	5.3	5.5	5.1
USA	47.3	44.7	47.6	38.5	30.9	32.8	42.5
OTHER WORLD	24.3	22.0	27.3	26.6	30.0	33.5	32.0

■ SOURCE: AEROSPATIALE

NON-WESTERN CIVIL AIRCRAFT FLEET BY YEAR OF MANUFACTURE

IN UNITS

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
HELICOPTERS	14	10	12	2	14	12	4	2	4	2	5	0	0
PISTONS/TURBOPROPS	101	83	76	87	103	87	71	35	43	56	74	54	18
NARROW BODY JETS	147	123	77	68	55	29	42	48	36	49	74	36	8
WIDE BODY JETS	6	2	5	16	7	5	10	7	5	11	6	5	0
CARGO JETS	23	34	35	29	20	35	26	27	44	37	20	14	0
TOTAL PASSENGER JETS	153	125	82	84	62	34	52	55	41	60	80	41	8
GRAND TOTAL	291	252	205	202	199	168	153	119	132	155	179	109	26
(% OF WORLD FLEET)	12.8%	12.1%	13.5%	18.9%	21.0%	16.1%	13.5%	10.4%	10.1%	11.1%	11.1%	6.8%	3.0%

IN SEATS (WITHOUT CARGO AIRCRAFT) - AS % OF GRAND TOTAL

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
HELICOPTERS	0.6	0.8	1.3	0.1	1.4	1.9	0.4	0.3	0.6	0.4	0.5	0.0	0.0
PISTONS/TURBOPROPS	6.7	7.7	9.1	9.8	17.4	22.9	12.8	7.6	11.3	11.3	10.5	14.2	27.2
NARROW BODY JETS	84.0	87.8	78.1	54.9	59.6	54.5	57.7	70.0	68.2	59.8	75.6	67.3	72.8
WIDE BODY JETS	8.7	3.7	11.4	35.2	21.7	20.7	29.1	22.1	19.8	28.4	13.3	18.5	0.0
TOTAL JET AIRCRAFT	92.7	91.5	89.5	90.1	81.2	75.2	86.8	92.0	88.1	88.2	88.9	85.8	72.8
GRAND TOTAL (SEATS)	24,088	18,697	15,291	15,902	11,304	8,467	12,028	11,097	8,581	13,365	15,795	8,912	1,978
(AVG. SEAT CAPACITY)	90	86	90	92	63	64	95	121	98	113	99	94	76

HELICOPTERS INCLUDE MIL (MI-2, MI-8, MI-17)

PISTONS/TURBOPROPS INCLUDE ANTONOV (AN-2, AN-24, AN-28, AN-32), HARBIN (Y11, Y12), ILYUSHIN (IL114),
LET (LE410, LE610), PZL MIELEC (M-18, M-20), SHIJIAZHANG (Y5)

NARROW BODY JETS INCLUDE ILYUSHIN (IL62), TUPOLEV (TU134, TU154, TU204), YAKOVLEV (YA40, YA42)

WIDE BODY JETS INCLUDE ILYUSHIN (IL86, IL96)

CARGO JETS INCLUDE ANTONOV (AN-124, AN-225), ILYUSHIN (IL76)

■ SOURCE: BUCHAIRDATABASE (JP AIRLINES FLEET - END 1992)

CIVIL TURBINE ENGINES

Data relating to *civil engines* are extracted from *JP Airlines Fleet - situation end 1992* (BUCHairDATABASE) and break down the *civil turbine aircraft engines inventory* by year of manufacture.

Civil engines are broken down according to: *category of engines, design origin, and geographical areas.*

Civil engines are broken down into the following *take-off thrust categories:*

- *Turbofan* above 14 Tons
- *Turbofan* between 7 and 14 Tons
- *Turbofan* between 3 and 7 Tons
- *Turbofan* below 3 Tons
- *Turboprop* and *Turboshaft*

For each category, the tables show the manufacturers' market shares according to the number and thrust of *civil engines delivered:*

- | | |
|------------------------------|-------------------------------------|
| ● <i>CFM International</i> | ● <i>IAE</i> |
| ● <i>Rolls-Royce</i> | ● <i>Turbomeca</i> |
| ● <i>Allison</i> | ● <i>Garrett</i> |
| ● <i>General Electric</i> | ● <i>Textron Lycoming</i> |
| ● <i>Pratt & Whitney</i> | ● <i>Pratt & Whitney Canada</i> |

Manufacturer reflects the company which originated the design (or has significantly re-designed /developed the engine) and does not necessarily indicate production/assembly origin.

A list of *civil engines* is given hereafter.

Turbofan below 3 Tons

- *GARRETT* ATF3
TFE731
- *GENERAL ELECTRIC* CF700
CJ610
- *PRATT & WHITNEY CANADA* JT15D

Turbofan between 3 and 7 Tons

- *GENERAL ELECTRIC* CF34
- *PRATT & WHITNEY* JT8D-9A
- *ROLLS-ROYCE* Spey
Tay
- *TEXTRON LYCOMING* ALF502

Turbofan between 7 and 14 Tons

- *CFM Int'l* CFM56
- *IAE* V2500

Turbofan between 7 and 14 Tons (continued)

- *PRATT & WHITNEY* JT3D-3B
JT8D-15/17
JT8D-209/217/219
- *ROLLS-ROYCE* Tay-670

Turbofan above 14 Tons

- *CFM Int'l* CFM56
- *GENERAL ELECTRIC* CF6
GE90
- *PRATT & WHITNEY* JT9D-7
PW2000/4000
- *ROLLS-ROYCE* RB211
Trent

Turboprop and Turboshaft

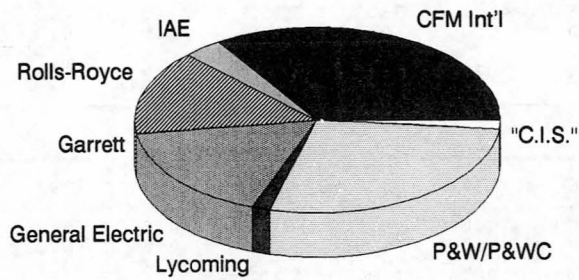
- *ALLISON* 250
501
T56
- *GARRETT* TPE331

Turboprop and Turboshaft (continued)

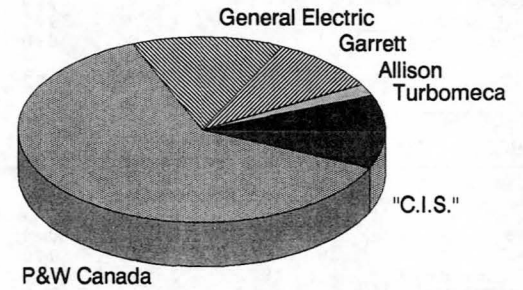
- *GENERAL ELECTRIC* CT58
CT64
CT7
 - *PRATT & WHITNEY CANADA* PT6
PW100
 - *ROLLS-ROYCE* Dart
Gem
Gnome
Tyne
 - *TEXTRON LYCOMING* 5512
LTS101
T53-13B/-17A
T5508D
 - *TURBOMECA* Arriel
Artouste
Astazou
Makila
Turmo
-

CIVIL TURBINE ENGINES MANUFACTURE

(UNITS - 1992)



TURBOFAN



TURBOPROP/SHAFT

■ SOURCE: BUCHAIRDATABASE (JP AIRLINES FLEET - END 1992)

CIVIL TURBINE ENGINES INVENTORY BY YEAR OF MANUFACTURE

MARKET SHARE BY MANUFACTURER (UNITS - AS % OF TOTAL)

TURBOFAN - T.O. THRUST BELOW 3 TONS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CFM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IAE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROLLS-ROYCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GARRETT	62.4	56.5	53.7	55.6	60.0	59.5	58.9	66.7	74.2	73.0	52.7	14.3
GENERAL ELECTRIC	6.6	2.5	7.3	7.4	8.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LYCOMING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PRATT-WHITNEY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
P-W CANADA	31.0	41.0	39.0	37.0	31.4	40.5	41.1	33.3	25.8	27.0	47.3	85.7
"C.I.S." (*)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (UNITS)	213	161	82	81	70	74	73	72	132	89	93	14

TURBOFAN - T.O. THRUST OF 3 TO 7 TONS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CFM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IAE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROLLS-ROYCE	18.2	23.2	39.8	21.1	20.7	26.6	16.6	19.3	21.6	25.6	40.2	72.2
GARRETT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GENERAL ELECTRIC	0.0	0.0	0.0	9.4	5.5	12.6	1.0	2.8	4.0	4.0	1.7	5.6
LYCOMING	4.4	22.0	22.3	25.7	57.9	42.0	60.1	62.4	57.6	47.1	47.9	22.2
PRATT-WHITNEY	25.2	29.3	5.8	3.5	2.8	0.0	2.1	1.8	0.0	0.0	0.0	0.0
P-W CANADA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
"C.I.S." (*)	52.2	25.6	32.0	40.4	13.1	18.9	20.2	13.8	16.8	23.2	10.3	0.0
TOTAL (UNITS)	274	164	206	171	145	143	193	218	250	297	234	108

(*) INCLUDES GLUSHENKOV, ISOTOV, IVCHENKO, KUZNETSOV, LOTAREV, SOLOVIEV AND WALTER

■ SOURCE: BUCHAIRDATABASE (JP AIRLINES FLEET - END 1992)

CIVIL TURBINE ENGINES INVENTORY BY YEAR OF MANUFACTURE

MARKET SHARE BY MANUFACTURER (UNITS - AS % OF TOTAL)

TURBOFAN - T.O. THRUST OF 7 TO 14 TONS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CFM	0.0	0.0	0.0	5.2	26.7	37.2	37.6	44.2	38.3	45.6	59.4	68.7
IAE	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	6.6	2.1	4.9	7.3
ROLLS-ROYCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GARRETT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GENERAL ELECTRIC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LYCOMING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PRATT-WHITNEY	61.9	48.3	44.9	52.2	34.6	31.4	32.5	30.6	24.2	27.4	24.5	20.7
P-W CANADA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
"C.I.S." (*)	38.1	51.7	55.1	42.6	38.7	31.4	29.7	25.2	30.8	24.9	11.2	3.4
TOTAL (UNITS)	885	665	530	427	584	732	745	824	908	1,030	1,108	716

TURBOFAN - T.O. THRUST ABOVE 14 TONS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CFM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.9
IAE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROLLS-ROYCE	35.7	25.3	21.4	13.0	21.8	19.6	18.9	12.0	27.9	27.8	19.6	21.6
GARRETT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GENERAL ELECTRIC	39.3	42.7	39.0	28.7	37.5	41.2	37.6	44.9	35.2	34.9	37.5	38.0
LYCOMING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PRATT-WHITNEY	25.0	32.0	39.6	58.3	37.9	33.4	35.7	28.6	33.0	36.7	37.6	38.5
P-W CANADA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
"C.I.S." (*)	0.0	0.0	0.0	0.0	2.8	5.8	7.8	14.5	3.9	0.6	4.7	0.0
TOTAL (UNITS)	440	316	346	247	285	347	359	483	466	676	765	647

(*) INCLUDES GLUSHENKOV, ISOTOV, IVCHENKO, KUZNETSOV, LOTAREV, SOLOVIEV AND WALTER

■ SOURCE: BUCHAIRDATABASE (JP AIRLINES FLEET - END 1992)

CIVIL TURBINE ENGINES INVENTORY BY YEAR OF MANUFACTURE

MARKET SHARE BY MANUFACTURER (UNITS - AS % OF TOTAL)

TURBOFAN - TOTAL

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CFM	0.0	0.0	0.0	2.4	14.4	21.0	20.4	22.8	19.8	22.5	30.1	33.9
IAE	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	3.4	1.1	2.5	3.5
ROLLS-ROYCE	11.4	9.0	13.4	7.3	8.5	8.2	7.3	6.3	10.5	12.6	11.1	14.7
GARRETT	7.3	7.0	3.8	4.9	3.9	3.4	3.1	3.0	5.6	3.1	2.2	0.1
GENERAL ELECTRIC	10.3	10.6	12.1	10.0	11.2	12.4	10.0	14.0	9.9	11.9	13.2	17.0
LYCOMING	0.7	2.8	4.0	4.8	7.7	4.6	8.5	8.5	8.2	6.7	5.1	1.6
PRATT-WHITNEY	40.1	36.0	33.2	40.3	29.0	26.7	27.3	24.7	21.3	25.3	25.5	26.7
P-W CANADA	3.6	5.1	2.7	3.2	2.0	2.3	2.2	1.5	1.9	1.1	2.0	0.8
"C.I.S." (*)	26.5	29.6	30.8	27.1	23.3	21.4	21.0	19.3	19.4	15.7	8.4	1.6
TOTAL (UNITS)	1,812	1,306	1,164	926	1,084	1,296	1,370	1,597	1,756	2,092	2,200	1,485

TURBOPROP AND TURBOSHAFT

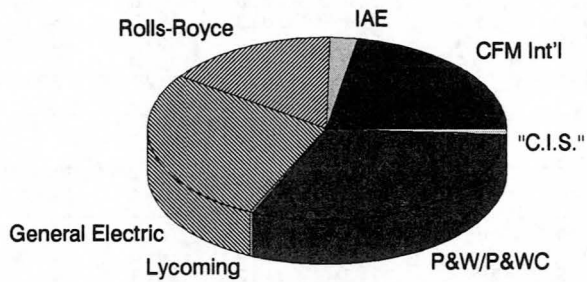
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ROLLS-ROYCE	2.2	4.1	3.5	4.3	2.3	2.9	2.0	0.4	0.0	0.0	0.0	0.0
TURBOMECA	7.0	12.0	15.4	10.3	8.3	7.7	7.9	4.4	4.9	6.0	9.6	6.2
ALLISON	29.4	28.7	18.6	15.9	11.9	7.9	8.3	7.2	9.9	11.7	9.7	2.0
GARRETT	12.8	13.0	21.2	12.8	16.2	19.7	22.0	18.1	11.0	10.7	11.2	9.5
GENERAL ELECTRIC	0.3	0.6	0.7	3.4	6.6	7.4	8.3	7.4	7.0	9.2	11.0	13.4
LYCOMING	2.4	2.1	3.1	3.1	3.8	6.5	3.9	1.7	2.0	2.1	1.3	0.0
P-W CANADA	36.2	27.5	21.0	28.7	34.0	37.8	45.7	59.1	59.3	50.5	49.2	62.2
"C.I.S." (*)	9.8	12.0	16.5	21.5	16.9	10.1	2.0	1.7	5.9	9.9	8.1	6.7
TOTAL (UNITS)	1,568	1,370	923	829	973	952	917	1,051	1,086	1,236	1,088	357

(*) INCLUDES GLUSHENKOV, ISOTOV, IVCHENKO, KUZNETSOV, LOTAREV, SOLOVIEV AND WALTER

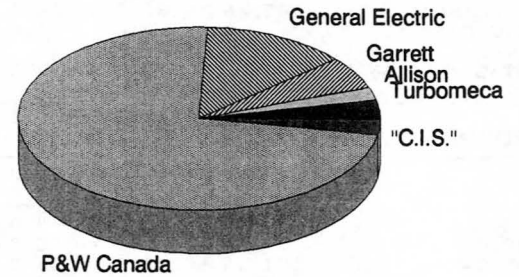
■ SOURCE: BUCHAIRDATABASE (JP AIRLINES FLEET - END 1992)

CIVIL TURBINE ENGINES MANUFACTURE

(T.O. THRUST - 1992)



TURBOFAN



TURBOPROP/SHAFT

■ SOURCE: BUCHAIRDATABASE (JP AIRLINES FLEET - END 1992)

CIVIL TURBINE ENGINES INVENTORY BY YEAR OF MANUFACTURE

MARKET SHARE BY MANUFACTURER (T.O. THRUST - AS % OF TOTAL)

TURBOFAN - T.O. THRUST BELOW 3 TONS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CFM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IAE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROLLS-ROYCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GARRETT	68.5	64.9	60.5	63.9	66.7	70.0	68.8	75.9	81.7	80.2	64.1	14.5
GENERAL ELECTRIC	8.9	3.5	10.0	9.7	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LYCOMING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PRATT-WHITNEY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
P-W CANADA	22.6	31.6	29.5	26.4	22.3	30.0	31.2	24.1	18.3	19.8	35.9	85.5
"C.I.S." (*)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL (MIO LB ST)	705	510	270	279	244	250	251	262	496	327	329	51

TURBOFAN - T.O. THRUST OF 3 TO 7 TONS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CFM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IAE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROLLS-ROYCE	14.0	19.8	36.8	19.5	24.1	30.5	20.5	27.3	31.2	34.9	54.1	84.0
GARRETT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GENERAL ELECTRIC	0.0	0.0	0.0	7.6	5.6	11.9	1.0	2.7	3.7	3.5	1.5	4.0
LYCOMING	2.3	13.3	13.4	15.8	44.8	30.0	44.5	46.2	40.7	30.6	30.8	12.0
PRATT-WHITNEY	27.0	35.3	7.4	4.5	4.4	0.0	3.2	2.8	0.0	0.0	0.0	0.0
P-W CANADA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
"C.I.S." (*)	56.7	31.6	42.3	52.7	21.0	27.7	30.8	21.0	24.4	31.0	13.6	0.0
TOTAL (MIO LB ST)	3,712	1,970	2,337	1,944	1,307	1,396	1,816	2,050	2,468	3,186	2,531	1,390

(*) INCLUDES GLUSHENKOV, ISOTOV, IVCHENKO, KUZNETSOV, LOTAREV, SOLOVIEV AND WALTER

■ SOURCE: BUCHAIRDATABASE (JP AIRLINES FLEET - END 1992)

CIVIL TURBINE ENGINES INVENTORY BY YEAR OF MANUFACTURE

MARKET SHARE BY MANUFACTURER (T.O. THRUST - AS % OF TOTAL)

TURBOFAN - T.O. THRUST OF 7 TO 14 TONS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CFM	0.0	0.0	0.0	4.9	25.4	35.3	36.4	43.6	37.3	45.5	60.1	69.6
IAE	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	7.2	2.4	5.4	8.0
ROLLS-ROYCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GARRETT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GENERAL ELECTRIC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LYCOMING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PRATT-WHITNEY	52.5	39.3	35.9	44.2	30.4	28.2	29.4	28.1	21.8	24.9	22.2	18.8
P-W CANADA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
"C.I.S." (*)	47.5	60.7	64.1	50.9	44.2	36.5	33.9	28.2	33.7	27.2	12.3	3.6
TOTAL (MIO LB ST)	17,180	13,810	11,447	8,898	12,597	15,746	16,169	18,122	20,702	23,182	24,965	16,202

TURBOFAN - T.O. THRUST ABOVE 14 TONS

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CFM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.1
IAE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ROLLS-ROYCE	35.0	24.2	19.7	12.0	20.4	18.9	17.8	10.1	25.6	26.9	18.5	19.9
GARRETT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GENERAL ELECTRIC	39.6	43.7	39.3	29.2	39.3	43.2	40.1	48.9	38.1	37.3	40.4	41.8
LYCOMING	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PRATT-WHITNEY	25.5	32.2	41.0	58.8	37.3	31.9	34.1	26.7	33.0	35.4	36.6	37.1
P-W CANADA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
"C.I.S." (*)	0.0	0.0	0.0	0.0	3.0	6.0	8.0	14.3	3.4	0.4	4.2	0.0
TOTAL (MIO LB ST)	22,421	15,865	17,257	12,215	13,867	17,161	17,969	24,832	24,746	36,015	41,151	34,869

(*) INCLUDES GLUSHENKOV, ISOTOV, IVCHENKO, KUZNETSOV, LOTAREV, SOLOVIEV AND WALTER

■ SOURCE: BUCHAIRDATABASE (JP AIRLINES FLEET - END 1992)

CIVIL TURBINE ENGINES INVENTORY BY YEAR OF MANUFACTURE

MARKET SHARE BY MANUFACTURER (T.O. THRUST - AS % OF TOTAL)

TURBOFAN - TOTAL

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CFM	0.0	0.0	0.0	1.9	11.4	16.1	16.3	17.5	16.0	16.8	21.9	22.2
IAE	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	3.1	0.9	2.0	2.5
ROLLS-ROYCE	19.0	13.1	13.6	7.9	11.2	10.6	9.9	6.8	14.7	17.2	13.0	15.5
GARRETT	1.1	1.0	0.5	0.8	0.6	0.5	0.5	0.4	0.8	0.4	0.3	0.0
GENERAL ELECTRIC	20.3	21.6	21.7	16.0	19.8	22.0	20.0	26.9	19.6	21.6	24.2	27.9
LYCOMING	0.2	0.8	1.0	1.3	2.1	1.2	2.2	2.1	2.1	1.6	1.1	0.3
PRATT-WHITNEY	35.7	34.9	36.3	48.0	32.3	28.7	30.2	26.1	26.2	29.5	29.9	30.5
P-W CANADA	0.4	0.5	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.1
"C.I.S." (*)	23.3	28.0	26.6	23.8	22.3	20.8	20.7	20.1	17.3	11.9	7.4	1.1
TOTAL (MIO LB ST)	44,017	32,155	31,310	23,337	28,016	34,553	36,205	45,266	48,412	62,709	68,975	52,512

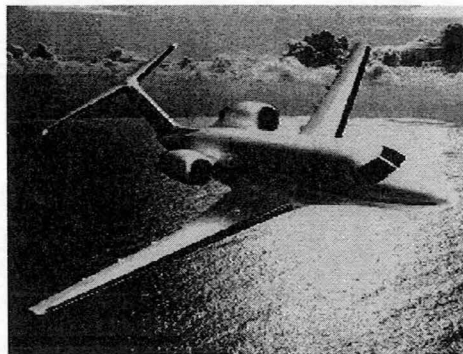
TURBOPROP AND TURBOSHAFT

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
ROLLS-ROYCE	5.2	10.7	7.4	9.9	7.2	3.7	1.7	0.6	0.0	0.0	0.0	0.0
TURBOMECA	5.8	11.6	19.5	11.3	7.5	4.4	4.9	2.3	2.5	3.7	5.4	3.4
ALLISON	21.9	22.2	11.2	8.4	10.1	3.1	8.9	2.5	4.6	7.2	5.5	2.3
GARRETT	14.6	13.7	22.9	13.5	15.0	17.2	16.8	13.4	8.2	8.2	8.4	5.6
GENERAL ELECTRIC	0.9	1.0	1.2	6.3	10.9	11.3	11.4	9.4	8.6	11.5	13.4	12.9
LYCOMING	4.1	3.1	2.8	2.0	2.3	3.3	1.8	0.8	0.9	0.9	0.6	0.0
P-W CANADA	39.1	27.9	21.9	32.1	35.2	48.3	53.1	69.2	70.7	62.6	62.4	73.0
"C.I.S." (*)	8.4	9.9	13.2	16.5	11.7	8.6	1.3	1.9	4.6	5.8	4.4	2.8
TOTAL (MIO SHP)	1,348	1,296	859	760	1,016	1,077	1,159	1,436	1,536	1,725	1,565	650

(*) INCLUDES GLUSHENKOV, ISOTOV, IVCHENKO, KUZNETSOV, LOTAREV, SOLOVIEV AND WALTER

■ SOURCE: BUCHAIRDATABASE (JP AIRLINES FLEET - END 1992)

LIGHT/BUSINESS AIRCRAFT & CIVIL HELICOPTERS



CHAPTER 3

LIGHT/BUSINESS AIRCRAFT

The data on the EU *light aircraft* fleet of single-engine aircraft, twin-engine aircraft and executive jets are compiled by *BUREAU VERITAS*.

The EU fleet of light aircraft (less than 15,000 kg.) is broken down into three categories:

- *single-engine aircraft* : less than 5.7 Tons
- *twin-engine aircraft* : less than 5.7 Tons
- *executive jets* : from 5.7 to 15 Tons

Data for Belgium (1988-91), Denmark (1988, 1990), Germany (1992), Greece (1986) and Spain (1986-90) are partly- estimated.

The data on the *business aircraft fleet* (in value and units) are prepared by *ITA* (Air Transport Institute, Paris).

There is no definition of what is a "*business aircraft*". These terms relate, however, to the transport of passengers traveling for business reasons. In this study, a "*business aircraft*" is defined as follows:

- an aircraft that is not used on scheduled routes,
- an aircraft whose services are not marketed to the public (via travel agencies, for example), the available capacity (generally limited) being bought for a sole use, linked to professional reasons. Therefore there is *double counting* of some large transport aircraft, which are also included

in the *transport aircraft* fleet (Chapter 2) and that are specially equipped for the V.I.P.,

- an aircraft that is not specifically equipped for other activities.

The study is limited to "*air taxi*" (i.e. commercial transport on request) or to private transport for companies or institutions having an aircraft fleet for their own needs (governments, businesses, etc.).

The study excludes piston aircraft, which by nature are designed for activities such as general aviation, leisure transport, training, etc.

The study distinguishes 3 main *business aircraft* categories:

- *large jet aircraft* whose initial use is not business transport, but that are specially equipped for that use and are called "V.I.P.",
- *small jet aircraft* specially build for business transport (their high costs imply that they are seldom used on scheduled routes),
- *turboprop aircraft* that are used for air taxi.

For the last 2 categories, and because of the large number of aircraft models, the study excludes those of which 10 units or less were in service for business transport (more or less 2% of the total market).

The price of the business jets and turboprops is the standard price, i.e. the average selling price, excluding the cost of the equipment.

The value of the fleet is computed as follows:

- for *aircraft that are no longer built*, an average price is computed between the aircraft maximum price, its minimum price and its price after some improvements, between the first year of manufacturing and the last one.
- for *aircraft still in production and put into service for more than 6 years*, the average price is estimated between the new aircraft price, weighted by a factor 2, its maximum price and its price after some improvements on aircraft of the first year of production.
- for *aircraft in production for 6 years or less*, the price of new aircraft is used.

The source for the table covering *business aircraft deliveries*, is *INTERAVIA/AEROSPACE WORLD* (figures provided by the US GAMA, supplemented by manufacturers and Interavia/Aerospace World itself).

A list of *business aircraft* and their categories is given in the following pages.

Business aircraft of EU design

Manufacturer	Model	Seats	Year	Value 1992 (Mio ECUS)
Business jets				
<i>AIRBUS</i>	A300-600		1984--	41.602
<i>AEROSPATIALE</i>	Caravelle		1958-73	1.387
	Corvette 100	6/12	1972-79	0.231
<i>BRITISH AEROSPACE</i>	BAC 111	79	1963-82	1.156
	HS-125-400/600	7/8	1962-76	0.539
	HS-125-700	8/10	1977-84	2.696
	HS-125-800	2 + 8	1984--	6.394
<i>DASSAULT-BREGUET</i>	Falcon 10/100	2 + 7	1973--	2.080
	Falcon 20/200	2 + 9	1965-88	3.159
	Falcon 50	2 + 10	1978--	9.245
	Falcon 900	2 + 12/14	1986--	16.410
<i>FOKKER</i>	F-28		1967--	5.393
<i>MBB</i>	Hansa Jet	9/15	1966-73	0.231
<i>SOCATA</i>	Paris Jet	4	1958-64	0.116

Business Turboprops

<i>BRITISH AEROSPACE</i>	Jetstream 31	2 + 18	1967--	2.080
	HS-748	40/50	1961--	1.849
<i>SHORT</i>	Skyvan	19	1966--	0.308
<i>FOKKER</i>	F-27	40/60	1957-85	0.847
<i>PILATUS</i>	Porter	8/11	1965--	0.154

Business aircraft of US design

Manufacturer	Model	Seats	Year	Value 1992 (Mio ECUS)
Business jets				
<i>BOEING</i>	B-707/720		1957-79	1.695
	B-727		1963-84	2.696
	B-737		1967--	4.391
	B-747SP		1969--	20.031
<i>McDONNELL DOUGLAS</i>	DC-8		1959--	1.310
	DC-9		1965-81	2.311
<i>BEECH</i>	Beechjet (Diamond II)	2 + 7/9	1985--	2.851
<i>CESSNA</i>	Citation /1	2 + 5/7	1972-85	0.847
	Citation II	2 + 10	1978--	2.311
	Citation III	2 + 13	1982--	4.237
<i>GATES LEARJET</i>	Learjet 23/24/25	2 + 6	1964-85	0.693
	Learjet 35/36	2 + 10	1974--	2.234
	Learjet 55	2 + 10	1980--	3.313
<i>GULFSTREAM</i>	G.II	10/19	1966-80	4.006
	G.III/IV	3 + 19	1979--	11.941
<i>LOCKHEED</i>	Jetstar 6/8/731	2 + 10	1960-73	0.578
	Jetstar II	2 + 10	1976-80	1.849
<i>ROCKWELL</i>	Jet Commander	2 + 8	1965-68	0.154
	Saber 40	2 + 8	1964-74	0.370
	Saber 60/65/75/80	2 + 10	1967-78	1.079

Business aircraft of US design (continued)

Manufacturer	Model	Seats	Year	Value 1992 (Mio ECUS)
Business Turboprops				
<i>BEECH</i>	Beech 18	10	1946-66	0.031
	King Air 90	1 + 9	1964--	0.701
	King Air 100	1 + 10	1969-83	0.539
	King Air 200	1 + 10	1973--	1.464
	King Air 300	1 + 10	1984--	2.311
	Beech 1900	2 + 19	1982--	2.465
<i>CESSNA</i>	C-421	1 + 7	1967-85	0.146
	C-425/441	1 + 10	1980--	0.847
<i>CONVAIR</i>	CV 580/640	56	1960-69	0.578
<i>FAIRCHILD</i>	F-27/FH-227	40	1958-68	0.462
	Merlin II	2 + 6	1967-68	0.154
	Merlin III	2 + 9	1970-83	0.462
	Merlin IV	2 + 15	1971--	1.233
<i>GULFSTREAM/ ROCKWELL</i>	Turbo-Commander	11	1966-69	0.077
	COM 681/690	9	1970-79	0.216
	COM 900/980/840	1 + 7/10	1980-85	0.693
	COM 1000	1 + 7/10	1981-85	1.002
	Gulfstream I	12/26	1959-69	0.462
	Gosse	7/11	1933-45	0.123
<i>PIPER</i>	P-31T /1	1 + 8	1974--	0.347
	P-31T-2/2XL	1 + 10	1981--	0.693
	P-42/400	11	1980--	1.387

Business aircraft of other design

Manufacturer	Model	Seats	Year	Value 1992 (Mio ECUS)
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Business jets

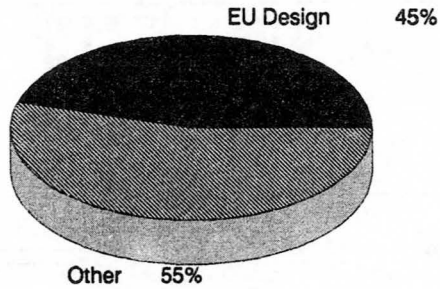
<i>CANADAIR</i>	CL-600	2 + 19	1980-83	4.700
	CL-601	2 + 19	1982--	11.325
<i>LAI</i>	Westwind 1/2	2 + 10	1965--	2.003
	Astra	2 + 10	1985--	4.391
<i>MITSUBISHI</i>	Diamond	9/11	1981-85	1.541

Business Turboprops

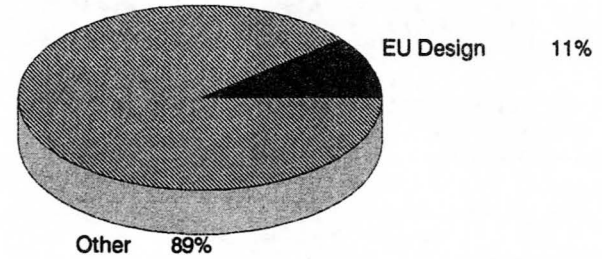
<i>DE HAVILLAND</i>	Twin Otter	22	1965--	0.424
	Dash 7	54	1977--	2.773
	Turbo Beaver	8	1948-68	0.035
<i>EMBRAER</i>	EMB-110	2 + 18	1973-89	0.847
	EMB-120/121	2 + 9	1979--	5.316
<i>MITSUBISHI</i>	MU-2	9	1967-85	0.293
	Marquise	11	1979-85	0.709

EU Light Aircraft Fleet

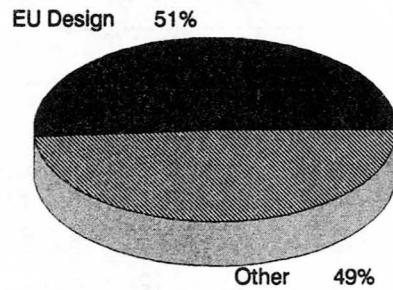
in units (1992)



SINGLE-ENGINE AIRCRAFT



TWIN-ENGINE AIRCRAFT



EXECUTIVE JET

■ SOURCE: BUREAU VERITAS

LIGHT AIRCRAFT FLEET (UNITS)

1) SINGLE-ENGINE

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK	EU
1985	625	5,470	702	224	4,728	107	239	1,221	43	393	212	4,771	18,735
1986	599	5,488	679	432	4,846	106	249	1,235	43	408	232	4,745	19,062
1987	635	5,578	685	657	4,913	109	196	1,239	43	439	237	5,081	19,812
1988	658	5,739	725	842	4,932	105	273	1,246	50	435	251	4,246	19,502
1989	730	5,902	819	875	5,037	110	290	1,296	53	467	272	4,587	20,438
1990	824	6,663	737	1,053	5,263	113	326	1,319	54	513	295	5,038	22,198
1991	881	6,554	703	1,114	5,420	142	294	1,367	54	513	332	4,890	22,264
1992	857	6,838	705	1,160	5,492	145	250	1,390	54	536	384	5,120	22,931

2) TWIN-ENGINE

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK	EU
1985	51	652	183	31	561	10	28	234	7	63	31	958	2,809
1986	76	674	190	64	619	10	37	262	9	82	33	776	2,832
1987	67	718	195	98	623	11	31	265	8	71	34	784	2,905
1988	71	738	185	137	691	6	38	273	8	89	35	756	3,027
1989	75	722	173	194	719	6	38	282	9	89	36	798	3,141
1990	94	719	155	222	780	21	41	288	11	92	37	863	3,323
1991	94	882	174	203	795	34	41	285	14	104	37	788	3,451
1992	82	887	167	209	789	35	35	239	13	96	42	756	3,350

3) EXECUTIVE JET

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK	EU
1985	3	48	14	0	65	0	3	64	1	13	1	72	284
1986	6	48	10	6	71	0	3	80	0	5	0	70	299
1987	4	70	10	13	73	0	2	86	1	7	0	75	341
1988	5	62	16	21	87	0	3	109	1	7	1	79	391
1989	5	56	21	25	98	0	2	123	0	8	3	73	414
1990	5	150	14	30	132	0	3	127	0	9	3	86	559
1991	5	86	24	67	129	0	4	139	0	9	3	89	555
1992	10	108	28	39	126	0	2	158	0	9	4	90	574

■ SOURCE: BUREAU VERITAS

LIGHT AIRCRAFT FLEET: MARKET SHARE OF EU-BUILT AIRCRAFT (AS %)

1) SINGLE-ENGINE

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK	EU
1985	38.1	38.4	26.1	28.1	67.8	36.4	56.5	55.4	30.2	14.5	24.5	48.6	48.5
1986	37.9	38.6	22.2	28.2	72.8	26.4	54.2	54.6	51.2	15.2	27.6	48.0	49.4
1987	38.7	39.4	19.7	28.2	71.2	16.5	46.9	54.5	51.2	15.3	27.8	45.8	48.1
1988	38.3	31.3	20.4	28.1	71.6	19.0	34.8	52.2	48.0	15.6	27.1	34.4	42.8
1989	38.2	30.8	21.1	28.1	70.7	21.8	14.1	48.1	41.5	16.1	26.8	37.0	42.2
1990	38.2	44.0	21.2	28.1	69.3	38.9	29.8	47.9	37.0	18.1	25.1	37.1	45.8
1991	38.3	32.3	16.2	29.4	75.6	19.7	38.8	49.0	27.8	17.7	26.5	36.2	43.9
1992	40.3	35.9	16.3	37.3	76.5	19.3	39.6	47.7	27.8	17.0	16.9	37.1	45.4

2) TWIN-ENGINE

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK	EU
1985	7.8	8.6	16.4	9.7	7.5	90.0	14.3	26.1	0.0	6.3	0.0	19.5	14.2
1986	7.9	8.2	10.0	9.4	6.1	80.0	18.9	24.8	11.1	8.5	15.2	14.9	11.8
1987	3.0	7.7	11.3	9.2	5.8	63.6	19.4	24.9	0.0	8.5	14.7	13.1	10.9
1988	5.6	7.6	9.7	9.5	5.5	0.0	18.4	24.5	0.0	10.1	14.3	11.8	10.1
1989	6.7	7.8	8.1	9.8	5.6	0.0	23.7	24.1	11.1	10.1	13.9	11.7	10.2
1990	6.4	9.6	8.4	9.5	5.1	42.9	17.1	24.3	27.3	9.8	10.8	11.9	10.7
1991	6.4	7.1	13.8	13.3	6.2	26.5	14.6	24.6	28.6	9.6	5.4	10.8	10.3
1992	0.0	8.1	13.2	12.9	6.5	25.7	14.3	30.1	30.8	11.5	9.5	11.6	10.9

3) EXECUTIVE JET

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK	EU
1985	33.3	43.8	28.6	-	73.8	-	66.7	57.8	100.0	30.8	0.0	77.8	61.3
1986	0.0	29.2	40.0	83.3	81.7	-	66.7	51.2	-	60.0	-	75.7	60.2
1987	0.0	27.1	40.0	76.9	80.8	-	50.0	47.7	100.0	57.1	-	69.3	56.0
1988	0.0	41.9	50.0	81.0	80.5	-	66.7	39.4	100.0	57.1	0.0	75.9	59.1
1989	0.0	39.3	52.4	80.0	80.6	-	0.0	50.4	-	50.0	100.0	65.8	60.1
1990	0.0	42.0	28.6	80.0	84.1	-	0.0	30.7	-	44.4	100.0	64.0	54.2
1991	0.0	30.2	16.7	46.3	86.0	-	0.0	37.4	-	44.4	100.0	66.3	52.3
1992	20.0	38.0	28.6	71.8	87.3	-	0.0	20.9	-	44.4	75.0	72.2	51.2

■ SOURCE: BUREAU VERITAS

BUSINESS AIRCRAFT FLEET

TOTAL (IN UNITS - AT YEAR-END)

WORLD TOTAL - GEOGRAPHICAL BREAKDOWN

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA	WORLD
1986	6.5%	2.1%	2.7%	2.8%	5.1%	2.8%	76.7%	1.2%	13,597
1987	7.6%	2.2%	2.8%	2.9%	5.5%	2.8%	74.7%	1.5%	13,798
1988	8.5%	2.6%	2.9%	2.9%	6.1%	3.1%	72.1%	1.7%	14,067
1989	9.2%	2.7%	2.9%	3.1%	6.6%	3.5%	70.4%	1.8%	14,374
1990	10.2%	2.7%	3.1%	3.1%	7.3%	3.7%	68.2%	1.6%	14,789
1991	10.3%	2.9%	3.3%	3.3%	7.9%	4.1%	66.7%	1.6%	14,957
1992	10.4%	2.9%	3.5%	3.3%	8.5%	4.7%	65.3%	1.5%	15,246

MARKET SHARE OF EU-BUILT AIRCRAFT (AS % OF TOTAL)

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA	WORLD
1986	27.8	14.8	23.7	20.8	2.7	11.5	9.6	13.2	11.3
1987	26.3	14.8	23.2	20.6	2.9	11.2	9.9	15.8	11.7
1988	26.0	16.4	21.5	18.8	2.6	10.5	10.2	14.0	11.9
1989	26.8	16.9	20.3	19.1	2.8	9.2	10.3	11.9	12.1
1990	27.0	18.2	18.4	19.4	3.0	8.8	10.4	11.2	12.2
1991	28.0	19.1	16.8	18.8	3.4	9.9	10.4	9.0	12.3
1992	27.8	18.5	17.5	19.3	3.9	11.5	10.5	8.7	12.5

BREAKDOWN OF EU-BUILT AIRCRAFT INTO GEOGRAPHICAL ZONES (%)

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA
1986	16.0	2.8	5.6	5.2	1.2	2.8	64.9	1.4
1987	17.1	2.8	5.4	5.2	1.4	2.7	63.4	2.0
1988	18.6	3.5	5.2	4.7	1.3	2.7	61.9	2.0
1989	20.4	3.7	4.9	4.8	1.6	2.7	60.2	1.7
1990	22.5	4.0	4.6	4.9	1.8	2.7	58.0	1.5
1991	23.3	4.5	4.5	5.0	2.2	3.2	56.1	1.1
1992	23.0	4.2	4.8	5.1	2.6	4.4	54.7	1.0

■ SOURCE: ITA

BUSINESS AIRCRAFT FLEET**TOTAL (IN MIO ECUS - AT YEAR-END)****WORLD TOTAL - GEOGRAPHICAL BREAKDOWN**

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA	WORLD
1986	7.0%	2.5%	3.1%	4.9%	4.2%	2.2%	74.8%	1.2%	25,941
1987	7.7%	2.4%	3.1%	5.3%	4.3%	2.1%	73.6%	1.5%	23,554
1988	8.8%	3.3%	3.2%	5.0%	4.3%	2.2%	71.6%	1.7%	24,552
1989	9.6%	3.5%	3.2%	5.5%	4.5%	2.4%	69.6%	1.8%	29,683
1990	11.1%	3.5%	3.3%	5.4%	5.1%	2.5%	67.4%	1.6%	29,442
1991	11.6%	3.7%	3.5%	5.7%	5.5%	2.8%	65.7%	1.5%	31,054
1992	11.4%	3.7%	3.7%	5.8%	5.9%	3.5%	64.7%	1.4%	31,928

MARKET SHARE OF EU-BUILT AIRCRAFT (AS % OF TOTAL)

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA	WORLD
1986	47.8	31.5	33.4	26.2	4.1	23.9	21.3	34.4	23.5
1987	45.6	35.3	33.7	31.2	5.0	23.2	21.8	38.9	24.4
1988	47.8	39.3	32.7	30.0	5.0	21.3	23.8	38.4	26.4
1989	48.9	35.8	33.7	30.7	6.0	19.5	23.2	41.0	26.3
1990	46.5	36.2	32.3	33.0	8.1	16.8	22.8	38.7	26.1
1991	47.9	35.8	33.0	32.1	9.5	19.0	22.7	31.8	26.3
1992	48.4	31.6	33.5	30.8	10.6	23.9	22.3	30.8	26.0

BREAKDOWN OF EU-BUILT AIRCRAFT INTO GEOGRAPHICAL ZONES (%)

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA
1986	14.2	3.4	4.4	5.5	0.7	2.3	67.7	1.8
1987	14.3	3.5	4.2	6.8	0.9	2.0	65.8	2.5
1988	16.0	4.9	3.9	5.7	0.8	1.8	64.5	2.5
1989	17.8	4.8	4.1	6.4	1.0	1.8	61.4	2.9
1990	19.7	4.9	4.1	6.8	1.6	1.6	58.8	2.4
1991	21.2	5.0	4.3	6.9	2.0	2.0	56.7	1.8
1992	21.2	4.5	4.7	6.8	2.4	3.2	55.6	1.7

■ SOURCE: ITA

BUSINESS AIRCRAFT FLEET**TOTAL (IN UNITS - AT YEAR-END)****TOTAL EU - BREAKDOWN BY MEMBER STATE (%)**

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	2.2	21.1	5.1	3.8	24.5	0.2	1.3	13.9	0.1	2.9	0.2	24.5
1987	2.0	20.7	5.4	4.6	24.3	0.1	1.2	16.1	0.2	2.1	0.3	23.0
1988	2.3	18.8	4.9	4.9	26.3	0.1	1.1	16.3	0.2	2.3	0.6	22.4
1989	2.3	17.5	4.0	5.1	30.4	0.1	1.0	16.9	0.2	2.4	0.7	19.5
1990	2.1	18.0	3.6	5.0	32.7	0.1	1.2	15.8	0.2	2.6	0.6	18.2
1991	2.2	19.7	3.6	5.2	31.8	0.1	1.0	15.6	0.2	2.4	0.7	17.5
1992	2.4	21.4	3.6	5.6	31.4	0.1	0.6	14.9	0.2	2.3	0.8	16.6

MARKET SHARE OF EU-BUILT AIRCRAFT (AS % OF TOTAL)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	0.0	16.0	8.9	26.5	36.7	0.0	25.0	32.3	100.0	26.9	0.0	33.5
1987	0.0	14.7	8.8	37.5	35.3	0.0	23.1	26.6	100.0	27.3	0.0	31.0
1988	3.7	16.0	8.5	40.7	32.7	0.0	7.7	22.1	50.0	25.0	14.3	33.6
1989	10.0	16.1	11.3	38.8	32.0	0.0	7.7	23.9	66.7	25.8	33.3	33.5
1990	9.4	14.4	9.3	35.5	32.9	0.0	5.6	22.2	66.7	23.1	33.3	37.6
1991	8.8	13.5	7.3	37.5	35.4	0.0	0.0	20.8	66.7	27.0	50.0	42.0
1992	7.9	11.5	8.8	37.1	35.3	50.0	10.0	22.0	66.7	22.2	38.5	43.9

BREAKDOWN OF EU-BUILT AIRCRAFT BY EU MEMBER STATE (%)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	0.0	12.1	1.6	3.6	32.4	0.0	1.2	16.2	0.4	2.8	0.0	29.6
1987	0.0	11.6	1.8	6.5	32.6	0.0	1.1	16.3	0.7	2.2	0.0	27.2
1988	0.3	11.5	1.6	7.7	33.0	0.0	0.3	13.8	0.3	2.2	0.3	28.8
1989	0.8	10.5	1.7	7.4	36.3	0.0	0.3	15.0	0.6	2.3	0.8	24.4
1990	0.7	9.6	1.2	6.6	39.8	0.0	0.2	13.0	0.5	2.2	0.7	25.3
1991	0.7	9.5	0.9	7.0	40.1	0.0	0.0	11.6	0.5	2.3	1.2	26.2
1992	0.7	8.9	1.1	7.5	39.9	0.2	0.2	11.8	0.5	1.8	1.1	26.2

■ SOURCE: ITA

BUSINESS AIRCRAFT FLEET**TOTAL (IN MIO ECUS - AT YEAR-END)****TOTAL EU - BREAKDOWN BY MEMBER STATE (%)**

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	2.5	17.9	3.5	3.0	25.6	0.2	1.2	19.0	0.5	3.3	0.1	23.3
1987	2.1	17.2	3.5	4.4	24.2	0.1	1.7	21.6	1.1	2.6	0.1	21.5
1988	2.5	14.9	2.9	4.7	26.2	0.1	1.8	21.3	0.8	2.6	0.4	21.9
1989	2.7	13.2	2.4	4.2	28.3	0.1	1.5	23.4	0.8	2.6	0.6	20.1
1990	2.3	13.8	2.2	3.9	29.7	0.0	2.4	21.0	0.6	2.5	0.5	21.1
1991	1.8	14.9	2.0	4.6	29.1	0.0	2.2	19.8	0.6	2.2	0.8	22.0
1992	1.9	16.8	2.4	5.3	28.5	0.5	1.5	19.1	0.6	2.0	0.9	20.7

MARKET SHARE OF EU-BUILT AIRCRAFT (AS % OF TOTAL)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	0.0	33.9	17.1	42.9	60.0	0.0	25.0	60.0	100.0	59.4	0.0	44.5
1987	0.0	31.5	13.8	60.9	61.3	0.0	13.0	48.6	100.0	63.9	0.0	40.5
1988	8.4	36.7	13.6	68.2	63.2	0.0	7.5	46.7	96.0	61.2	56.5	42.9
1989	23.8	34.4	17.1	66.7	62.0	0.0	7.5	49.4	96.7	63.4	79.5	40.9
1990	22.2	28.0	13.6	58.5	60.7	0.0	3.9	44.2	96.4	58.7	78.1	46.1
1991	20.1	27.5	10.1	63.1	61.6	0.0	0.0	42.1	96.2	60.5	93.7	52.1
1992	19.0	24.1	26.2	65.5	60.9	91.8	11.9	45.1	95.9	51.4	83.4	53.5

BREAKDOWN OF EU-BUILT AIRCRAFT BY EU MEMBER STATE (%)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	0.0	12.7	1.3	2.7	32.1	0.0	0.6	23.9	1.0	4.1	0.0	21.6
1987	0.0	11.9	1.1	5.9	32.6	0.0	0.5	23.0	2.4	3.7	0.0	19.1
1988	0.4	11.5	0.8	6.6	34.6	0.0	0.3	20.8	1.6	3.3	0.4	19.6
1989	1.3	9.3	0.8	5.7	35.9	0.0	0.2	23.7	1.7	3.4	1.0	16.8
1990	1.1	8.3	0.6	5.0	38.7	0.0	0.2	19.9	1.3	3.1	0.8	20.9
1991	0.8	8.5	0.4	6.1	37.4	0.0	0.0	17.4	1.2	2.7	1.6	23.9
1992	0.7	8.4	1.3	7.2	35.8	0.9	0.4	17.8	1.1	2.1	1.6	22.8

■ SOURCE: ITA

BUSINESS AIRCRAFT FLEET

V.I.P. (IN UNITS - AT YEAR-END)

WORLD TOTAL - GEOGRAPHICAL BREAKDOWN

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA	WORLD
1986	4.5%	3.7%	11.2%	23.1%	0.7%	5.2%	50.7%	0.7%	134
1987	5.1%	2.9%	12.4%	24.8%	0.7%	5.1%	46.7%	2.2%	137
1988	3.8%	3.1%	10.7%	25.2%	0.8%	4.6%	50.4%	1.5%	131
1989	3.8%	3.0%	9.8%	25.0%	0.8%	4.5%	50.8%	2.3%	132
1990	5.3%	3.0%	10.5%	25.6%	0.8%	3.8%	49.6%	1.5%	133
1991	5.1%	2.9%	10.3%	27.2%	0.7%	3.7%	47.8%	2.2%	136
1992	4.9%	2.8%	9.8%	29.4%	0.7%	4.2%	44.8%	3.5%	143

MARKET SHARE OF EU-BUILT AIRCRAFT (AS % OF TOTAL)

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA	WORLD
1986	0.0	20.0	20.0	0.0	0.0	0.0	1.5	0.0	3.7
1987	14.3	0.0	17.6	5.9	0.0	0.0	1.6	0.0	5.1
1988	20.0	0.0	0.0	6.1	0.0	0.0	1.5	0.0	3.1
1989	0.0	0.0	0.0	6.1	0.0	0.0	1.5	0.0	2.3
1990	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0	1.5
1991	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0	1.5
1992	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	1.4

BREAKDOWN OF EU-BUILT AIRCRAFT INTO GEOGRAPHICAL ZONES (%)

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA
1986	0.0	20.0	60.0	0.0	0.0	0.0	20.0	0.0
1987	14.3	0.0	42.9	28.6	0.0	0.0	14.3	0.0
1988	25.0	0.0	0.0	50.0	0.0	0.0	25.0	0.0
1989	0.0	0.0	0.0	66.7	0.0	0.0	33.3	0.0
1990	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
1991	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
1992	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0

■ SOURCE: ITA

BUSINESS AIRCRAFT FLEET

V.I.P. (IN MIO ECUS - AT YEAR-END)

WORLD TOTAL - GEOGRAPHICAL BREAKDOWN

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA	WORLD
1986	4.2%	3.3%	7.7%	31.2%	1.2%	5.8%	45.9%	0.7%	565
1987	3.8%	2.5%	7.2%	42.6%	1.0%	4.9%	36.2%	1.8%	571
1988	3.0%	2.4%	6.4%	44.1%	0.9%	4.2%	37.8%	1.2%	508
1989	2.8%	2.5%	5.9%	45.0%	0.9%	4.0%	37.2%	1.7%	611
1990	3.5%	2.4%	6.3%	47.2%	0.9%	3.3%	35.5%	1.0%	561
1991	3.3%	2.2%	5.8%	50.4%	0.8%	3.0%	33.4%	1.2%	594
1992	2.9%	1.8%	5.0%	55.5%	0.7%	3.3%	28.4%	2.4%	642

MARKET SHARE OF EU-BUILT AIRCRAFT (AS % OF TOTAL)

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA	WORLD
1986	0.0	9.3	12.0	0.0	0.0	0.0	0.7	0.0	1.5
1987	7.0	0.0	11.2	37.4	0.0	0.0	0.7	0.0	17.3
1988	9.6	0.0	0.0	39.4	0.0	0.0	0.8	0.0	18.0
1989	0.0	0.0	0.0	35.0	0.0	0.0	0.7	0.0	16.0
1990	0.0	0.0	0.0	31.7	0.0	0.0	0.0	0.0	15.0
1991	0.0	0.0	0.0	28.7	0.0	0.0	0.0	0.0	14.5
1992	0.0	0.0	0.0	23.3	0.0	0.0	0.0	0.0	13.0

BREAKDOWN OF EU-BUILT AIRCRAFT INTO GEOGRAPHICAL ZONES (%)

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA
1986	0.0	20.0	60.0	0.0	0.0	0.0	20.0	0.0
1987	1.5	0.0	4.6	92.3	0.0	0.0	1.5	0.0
1988	1.6	0.0	0.0	96.8	0.0	0.0	1.6	0.0
1989	0.0	0.0	0.0	98.4	0.0	0.0	1.6	0.0
1990	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
1991	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
1992	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0

■ SOURCE: ITA

BUSINESS AIRCRAFT FLEET**V.I.P. (IN UNITS - AT YEAR-END)****TOTAL EU - BREAKDOWN BY MEMBER STATE (%)**

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
1987	0.0	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	85.7
1988	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0
1989	0.0	0.0	0.0	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	80.0
1990	0.0	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0	0.0	0.0	85.7
1991	0.0	0.0	0.0	0.0	42.9	0.0	0.0	0.0	0.0	0.0	0.0	57.1
1992	0.0	0.0	0.0	0.0	57.1	14.3	0.0	0.0	0.0	0.0	0.0	28.6

MARKET SHARE OF EU-BUILT AIRCRAFT (AS % OF TOTAL)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1989	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1990	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1991	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1992	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

BREAKDOWN OF EU-BUILT AIRCRAFT BY EU MEMBER STATE (%)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	-	-	-	-	-	-	-	-	-	-	-	-
1987	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1989	-	-	-	-	-	-	-	-	-	-	-	-
1990	-	-	-	-	-	-	-	-	-	-	-	-
1991	-	-	-	-	-	-	-	-	-	-	-	-
1992	-	-	-	-	-	-	-	-	-	-	-	-

■ SOURCE: ITA

BUSINESS AIRCRAFT FLEET**V.I.P. (IN MIO ECUS - AT YEAR-END)****TOTAL EU - BREAKDOWN BY MEMBER STATE (%)**

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
1987	0.0	0.0	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0
1988	0.0	0.0	0.0	0.0	9.6	0.0	0.0	0.0	0.0	0.0	0.0	90.4
1989	0.0	0.0	0.0	0.0	20.2	0.0	0.0	0.0	0.0	0.0	0.0	79.8
1990	0.0	0.0	0.0	0.0	15.1	0.0	0.0	0.0	0.0	0.0	0.0	84.9
1991	0.0	0.0	0.0	0.0	46.1	0.0	0.0	0.0	0.0	0.0	0.0	53.9
1992	0.0	0.0	0.0	0.0	58.3	14.6	0.0	0.0	0.0	0.0	0.0	27.1

MARKET SHARE OF EU-BUILT AIRCRAFT (AS % OF TOTAL)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1989	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1990	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1991	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1992	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

BREAKDOWN OF EU-BUILT AIRCRAFT BY EU MEMBER STATE (%)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	-	-	-	-	-	-	-	-	-	-	-	-
1987	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1989	-	-	-	-	-	-	-	-	-	-	-	-
1990	-	-	-	-	-	-	-	-	-	-	-	-
1991	-	-	-	-	-	-	-	-	-	-	-	-
1992	-	-	-	-	-	-	-	-	-	-	-	-

■ SOURCE: ITA

BUSINESS AIRCRAFT FLEET**JETS = V.I.P. + OTHER JETS (IN UNITS - AT YEAR-END)****WORLD TOTAL - GEOGRAPHICAL BREAKDOWN**

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA	WORLD
1986	7.2%	2.3%	2.3%	3.6%	3.1%	3.2%	77.3%	1.1%	5,987
1987	8.0%	2.3%	2.4%	3.5%	3.5%	3.3%	75.7%	1.3%	6,183
1988	9.0%	2.8%	2.5%	3.3%	4.0%	3.7%	73.3%	1.4%	6,379
1989	9.6%	3.0%	2.4%	3.4%	4.4%	4.2%	71.5%	1.3%	6,609
1990	10.9%	3.1%	2.5%	3.4%	5.0%	4.6%	69.2%	1.2%	6,910
1991	11.2%	3.4%	2.5%	3.6%	5.5%	5.1%	67.6%	1.1%	7,062
1992	11.1%	3.4%	2.7%	3.6%	5.8%	6.1%	66.2%	1.1%	7,312

MARKET SHARE OF EU-BUILT AIRCRAFT (AS % OF TOTAL)

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA	WORLD
1986	52.2	27.4	50.7	32.4	7.5	20.8	20.9	33.3	24.1
1987	50.8	27.5	48.7	33.9	7.9	20.0	21.2	39.2	24.6
1988	49.7	30.2	45.0	31.6	6.7	18.1	21.5	37.1	24.7
1989	50.4	29.1	43.5	32.6	7.5	15.4	21.5	32.6	24.7
1990	49.6	30.9	39.2	33.5	8.1	14.1	21.3	30.6	24.7
1991	50.4	31.3	37.9	32.2	9.1	15.9	21.1	25.0	24.6
1992	48.9	30.3	38.7	31.7	10.5	17.9	21.0	23.5	24.5

BREAKDOWN OF EU-BUILT AIRCRAFT INTO GEOGRAPHICAL ZONES (%)

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA
1986	15.5	2.6	4.9	4.8	1.0	2.8	67.0	1.5
1987	16.5	2.6	4.8	4.9	1.1	2.7	65.4	2.0
1988	18.0	3.4	4.6	4.3	1.1	2.7	63.8	2.1
1989	19.6	3.6	4.3	4.5	1.3	2.6	62.3	1.8
1990	21.8	3.9	4.0	4.6	1.6	2.6	59.8	1.5
1991	22.8	4.4	3.9	4.7	2.0	3.3	57.8	1.1
1992	22.2	4.2	4.2	4.6	2.5	4.5	56.7	1.1

■ SOURCE: IATA

BUSINESS AIRCRAFT FLEET

JETS = V.I.P. + OTHER JETS (IN MIO ECUS - AT YEAR-END)

WORLD TOTAL - GEOGRAPHICAL BREAKDOWN

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA	WORLD
1986	7.0%	2.8%	3.0%	6.0%	2.3%	2.3%	75.5%	1.2%	18,368
1987	7.4%	2.6%	2.9%	6.3%	2.3%	2.1%	74.8%	1.5%	17,160
1988	8.7%	3.6%	3.0%	5.7%	2.4%	2.2%	72.7%	1.6%	18,461
1989	9.5%	3.9%	2.9%	6.2%	2.6%	2.4%	70.8%	1.8%	22,693
1990	11.1%	3.9%	3.0%	6.1%	3.3%	2.5%	68.6%	1.5%	22,671
1991	11.9%	4.0%	3.0%	6.4%	3.7%	2.8%	66.8%	1.3%	23,945
1992	11.4%	4.0%	3.2%	6.4%	4.1%	3.7%	65.9%	1.3%	25,032

MARKET SHARE OF EU-BUILT AIRCRAFT (AS % OF TOTAL)

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA	WORLD
1986	63.8	39.4	45.7	29.6	10.2	32.4	29.6	50.4	32.6
1987	61.9	44.8	46.1	35.6	12.1	31.3	29.3	53.9	33.0
1988	62.0	46.7	44.1	34.3	11.2	27.8	30.9	53.1	34.6
1989	62.7	41.6	46.0	34.8	13.1	25.1	29.7	55.7	34.0
1990	58.8	42.5	44.5	37.4	16.3	21.2	28.9	54.1	33.5
1991	59.5	41.6	47.3	36.4	18.6	24.0	28.8	46.7	33.8
1992	60.4	36.8	47.1	34.5	19.3	28.9	27.9	44.1	32.9

BREAKDOWN OF EU-BUILT AIRCRAFT INTO GEOGRAPHICAL ZONES (%)

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA
1986	13.7	3.4	4.2	5.5	0.7	2.3	68.5	1.8
1987	13.9	3.5	4.1	6.7	0.9	2.0	66.4	2.5
1988	15.6	4.9	3.8	5.6	0.8	1.8	65.0	2.5
1989	17.5	4.7	3.9	6.3	1.0	1.8	61.9	2.9
1990	19.5	4.9	4.0	6.8	1.6	1.6	59.2	2.5
1991	21.1	5.0	4.2	6.9	2.0	2.0	57.0	1.8
1992	21.0	4.4	4.6	6.8	2.4	3.2	55.8	1.7

■ SOURCE: ITA

BUSINESS AIRCRAFT FLEET**JETS = V.I.P. + OTHER JETS (IN UNITS - AT YEAR-END)****TOTAL EU - BREAKDOWN BY MEMBER STATE (%)**

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	1.2	15.2	3.5	4.0	23.8	0.2	1.9	22.1	0.2	3.5	0.0	24.5
1987	1.6	15.4	3.2	5.5	22.3	0.0	1.8	24.1	0.4	2.0	0.0	23.7
1988	1.6	13.5	3.1	5.8	22.4	0.0	1.6	24.1	0.2	2.3	0.3	25.2
1989	1.7	12.1	3.1	6.0	23.5	0.0	1.4	26.0	0.3	2.4	0.6	22.8
1990	1.7	12.9	2.8	5.2	25.6	0.0	1.9	24.3	0.3	2.5	0.5	22.3
1991	1.8	13.8	2.8	5.7	25.1	0.0	1.4	23.5	0.3	2.5	0.6	22.5
1992	2.1	15.0	2.8	6.0	24.8	0.1	0.9	22.9	0.2	2.2	1.0	21.9

MARKET SHARE OF EU-BUILT AIRCRAFT (AS % OF TOTAL)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	0.0	30.8	26.7	52.9	74.5	0.0	37.5	42.1	100.0	40.0	0.0	61.9
1987	0.0	28.9	31.3	66.7	77.3	0.0	33.3	36.1	100.0	50.0	0.0	58.1
1988	11.1	33.8	27.8	72.7	77.3	0.0	11.1	29.7	100.0	46.2	50.0	54.9
1989	27.3	32.5	25.0	68.4	80.5	0.0	11.1	30.3	100.0	46.7	75.0	53.8
1990	23.1	27.8	19.0	69.2	79.7	0.0	7.1	27.5	100.0	42.1	75.0	56.3
1991	21.4	27.5	18.2	66.7	82.3	0.0	0.0	25.4	100.0	45.0	100.0	58.8
1992	17.6	23.8	21.7	65.3	79.6	100.0	14.3	26.3	100.0	38.9	62.5	57.9

BREAKDOWN OF EU-BUILT AIRCRAFT BY EU MEMBER STATE (%)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	0.0	8.9	1.8	4.0	33.9	0.0	1.3	17.9	0.4	2.7	0.0	29.0
1987	0.0	8.8	2.0	7.2	33.9	0.0	1.2	17.1	0.8	2.0	0.0	27.1
1988	0.4	9.2	1.8	8.5	34.9	0.0	0.4	14.4	0.4	2.1	0.4	27.8
1989	0.9	7.8	1.6	8.1	37.5	0.0	0.3	15.6	0.6	2.2	0.9	24.4
1990	0.8	7.3	1.1	7.3	41.1	0.0	0.3	13.4	0.5	2.2	0.8	25.3
1991	0.8	7.6	1.0	7.6	41.1	0.0	0.0	11.8	0.5	2.3	1.3	26.2
1992	0.8	7.3	1.3	8.1	40.3	0.3	0.3	12.3	0.5	1.8	1.3	25.9

■ SOURCE: IATA

BUSINESS AIRCRAFT FLEET**JETS = V.I.P. + OTHER JETS (IN MIO ECUS - AT YEAR-END)****TOTAL EU - BREAKDOWN BY MEMBER STATE (%)**

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	0.6	14.1	2.9	3.2	26.6	0.2	1.3	24.7	0.7	3.7	0.0	22.0
1987	0.6	13.7	2.2	5.3	24.2	0.0	2.1	27.4	1.5	2.8	0.0	20.2
1988	1.5	11.7	1.8	5.4	25.4	0.0	2.2	26.1	1.0	2.7	0.4	21.6
1989	2.0	9.8	1.7	4.8	25.9	0.0	1.8	28.7	1.1	2.8	0.8	20.7
1990	1.6	11.0	1.6	4.2	26.7	0.0	2.9	25.6	0.8	2.5	0.5	22.5
1991	1.0	11.9	1.5	5.0	26.4	0.0	2.7	23.5	0.7	2.2	1.0	24.0
1992	1.1	13.5	1.9	5.8	25.8	0.6	1.8	23.0	0.7	1.9	1.1	22.8

MARKET SHARE OF EU-BUILT AIRCRAFT (AS % OF TOTAL)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	0.0	46.6	29.6	57.4	81.1	0.0	31.3	65.2	100.0	74.4	0.0	59.3
1987	0.0	45.3	31.0	71.3	86.3	0.0	15.0	54.1	100.0	84.1	0.0	56.1
1988	18.7	53.5	29.3	78.7	87.4	0.0	8.3	51.4	100.0	76.8	71.1	53.0
1989	43.5	51.6	25.6	76.6	89.3	0.0	8.4	53.1	100.0	79.3	88.6	49.2
1990	40.2	39.4	18.5	70.6	86.9	0.0	4.2	46.7	100.0	74.6	88.2	53.6
1991	44.5	38.9	16.7	73.2	85.5	0.0	0.0	44.8	100.0	75.9	100.0	58.4
1992	40.7	35.8	41.0	76.4	84.6	100.0	12.5	47.4	100.0	67.5	87.5	59.0

BREAKDOWN OF EU-BUILT AIRCRAFT BY EU MEMBER STATE (%)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	0.0	10.3	1.3	2.8	33.8	0.0	0.7	25.2	1.1	4.3	0.0	20.5
1987	0.0	10.0	1.1	6.1	33.8	0.0	0.5	23.9	2.5	3.8	0.0	18.3
1988	0.5	10.1	0.9	6.9	35.8	0.0	0.3	21.6	1.6	3.4	0.5	18.4
1989	1.4	8.1	0.7	5.9	36.9	0.0	0.2	24.3	1.7	3.5	1.1	16.3
1990	1.1	7.3	0.5	5.1	39.5	0.0	0.2	20.4	1.4	3.2	0.8	20.5
1991	0.8	7.8	0.4	6.2	38.0	0.0	0.0	17.7	1.2	2.8	1.7	23.5
1992	0.7	8.0	1.3	7.3	36.2	0.9	0.4	18.0	1.1	2.1	1.6	22.3

■ SOURCE: IATA

BUSINESS AIRCRAFT FLEET**TURBOPROPS (IN UNITS - AT YEAR-END)****WORLD TOTAL - GEOGRAPHICAL BREAKDOWN**

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA	WORLD
1986	6.1%	2.0%	2.9%	2.2%	6.7%	2.4%	76.3%	1.4%	7,610
1987	7.3%	2.1%	3.0%	2.5%	7.1%	2.5%	73.8%	1.6%	7,615
1988	8.2%	2.4%	3.2%	2.6%	7.9%	2.6%	71.2%	2.0%	7,688
1989	8.8%	2.4%	3.3%	2.8%	8.4%	2.8%	69.4%	2.1%	7,765
1990	9.6%	2.3%	3.6%	2.9%	9.4%	2.9%	67.4%	2.0%	7,879
1991	9.5%	2.4%	4.0%	3.0%	10.1%	3.1%	65.8%	2.0%	7,895
1992	9.7%	2.4%	4.2%	3.1%	10.9%	3.4%	64.4%	1.9%	7,934

MARKET SHARE OF EU-BUILT AIRCRAFT (AS % OF TOTAL)

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA	WORLD
1986	5.0	3.9	6.7	5.9	1.0	1.6	0.6	1.0	1.2
1987	4.5	3.7	6.5	5.3	0.9	1.6	0.6	0.8	1.3
1988	4.5	2.8	6.1	5.4	0.8	1.5	0.6	0.6	1.3
1989	4.8	3.8	5.8	5.1	0.8	1.4	0.5	0.6	1.3
1990	4.6	3.3	5.3	4.9	0.7	1.3	0.5	0.6	1.3
1991	4.5	3.7	5.0	4.6	0.6	1.2	0.6	0.6	1.4
1992	5.5	2.7	5.1	6.1	0.6	1.1	0.6	0.7	1.5

BREAKDOWN OF EU-BUILT AIRCRAFT INTO GEOGRAPHICAL ZONES (%)

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA
1986	24.2	6.3	15.8	10.5	5.3	3.2	33.7	1.1
1987	26.0	6.3	15.6	10.4	5.2	3.1	32.3	1.0
1988	28.3	5.1	15.2	11.1	5.1	3.0	31.3	1.0
1989	31.7	6.7	14.4	10.6	4.8	2.9	27.9	1.0
1990	33.3	5.7	14.3	10.5	4.8	2.9	27.6	1.0
1991	31.8	6.5	15.0	10.3	4.7	2.8	28.0	0.9
1992	35.6	4.2	14.4	12.7	4.2	2.5	25.4	0.8

■ SOURCE: IATA

BUSINESS AIRCRAFT FLEET

TURBOPROPS (IN MIO ECUS - AT YEAR-END)

WORLD TOTAL - GEOGRAPHICAL BREAKDOWN

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA	WORLD
1986	7.0%	2.0%	3.3%	2.3%	8.9%	2.1%	73.0%	1.4%	7,574
1987	8.3%	2.1%	3.5%	2.6%	9.6%	2.1%	70.2%	1.6%	6,394
1988	9.2%	2.3%	3.7%	2.9%	9.8%	2.2%	68.0%	1.9%	6,091
1989	9.9%	2.3%	4.0%	3.1%	10.5%	2.4%	65.8%	2.1%	6,989
1990	10.9%	2.5%	4.3%	3.0%	11.4%	2.3%	63.5%	2.1%	6,771
1991	10.6%	2.6%	4.9%	3.1%	11.9%	2.6%	62.1%	2.1%	7,108
1992	11.1%	2.6%	5.2%	3.3%	12.4%	2.9%	60.5%	2.0%	6,896

MARKET SHARE OF EU-BUILT AIRCRAFT (AS % OF TOTAL)

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA	WORLD
1986	8.8	4.5	6.6	4.5	0.4	1.4	0.4	1.1	1.4
1987	6.3	3.8	5.6	3.5	0.3	1.3	0.4	0.8	1.2
1988	7.1	3.4	5.4	4.5	0.3	1.3	0.5	0.7	1.5
1989	5.7	4.8	4.8	3.9	0.2	0.9	0.5	0.7	1.4
1990	4.7	3.9	3.9	3.4	0.2	0.8	0.4	0.6	1.2
1991	4.0	4.7	3.2	2.9	0.1	0.6	0.4	0.6	1.1
1992	3.5	2.5	2.7	4.1	0.1	0.5	0.4	0.6	1.0

BREAKDOWN OF EU-BUILT AIRCRAFT INTO GEOGRAPHICAL ZONES (%)

	EU	REST OF EUROPE	AFRICA	ASIA	SOUTH AMERICA	CENTRAL AMERICA	NORTH AMERICA	AUSTRAL ASIA
1986	43.2	6.3	15.6	7.3	2.2	2.1	22.3	1.0
1987	42.1	6.4	15.7	7.4	2.3	2.1	22.8	1.1
1988	44.2	5.2	13.7	8.8	2.0	1.8	23.3	0.9
1989	42.0	8.3	14.4	8.8	1.8	1.6	22.0	1.1
1990	43.1	8.3	14.2	8.6	1.7	1.5	21.4	1.1
1991	39.3	11.2	14.6	8.5	1.6	1.4	22.1	1.2
1992	38.8	6.4	14.2	13.5	1.6	1.3	23.0	1.2

■ SOURCE: ITA

BUSINESS AIRCRAFT FLEET**TURBOPROPS (IN UNITS - AT YEAR-END)****TOTAL EU - BREAKDOWN BY MEMBER STATE (%)**

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	3.3	26.7	6.5	3.7	25.2	0.2	0.9	6.3	0.0	2.4	0.4	24.5
1987	2.3	25.5	7.4	3.8	26.0	0.2	0.7	9.0	0.0	2.2	0.5	22.4
1988	2.9	23.6	6.5	4.1	29.8	0.2	0.6	9.1	0.2	2.4	0.8	19.8
1989	2.8	22.5	4.8	4.3	36.9	0.1	0.6	8.4	0.1	2.3	0.7	16.4
1990	2.5	22.9	4.3	4.9	39.7	0.1	0.5	7.5	0.1	2.6	0.7	14.1
1991	2.7	25.9	4.4	4.7	38.9	0.1	0.7	7.3	0.1	2.3	0.7	12.3
1992	2.7	28.2	4.4	5.2	38.4	0.1	0.4	6.5	0.1	2.3	0.7	10.9

MARKET SHARE OF EU-BUILT AIRCRAFT (AS % OF TOTAL)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	0.0	8.1	0.0	0.0	3.4	0.0	0.0	0.0	0.0	9.1	0.0	7.1
1987	0.0	7.0	0.0	0.0	3.4	0.0	0.0	4.0	0.0	8.3	0.0	5.6
1988	0.0	6.8	0.0	0.0	2.1	0.0	0.0	3.5	0.0	6.7	0.0	8.9
1989	0.0	7.8	3.0	0.0	3.2	0.0	0.0	5.3	0.0	6.3	0.0	7.1
1990	0.0	6.9	3.0	0.0	3.0	0.0	0.0	5.3	0.0	5.0	0.0	8.4
1991	0.0	5.7	0.0	0.0	3.4	0.0	0.0	5.5	0.0	5.9	0.0	9.8
1992	0.0	4.6	0.0	2.5	5.1	0.0	0.0	6.0	0.0	5.6	0.0	14.3

BREAKDOWN OF EU-BUILT AIRCRAFT BY EU MEMBER STATE (%)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	0.0	43.5	0.0	0.0	17.4	0.0	0.0	0.0	0.0	4.3	0.0	34.8
1987	0.0	40.0	0.0	0.0	20.0	0.0	0.0	8.0	0.0	4.0	0.0	28.0
1988	0.0	35.7	0.0	0.0	14.3	0.0	0.0	7.1	0.0	3.6	0.0	39.3
1989	0.0	36.4	3.0	0.0	24.2	0.0	0.0	9.1	0.0	3.0	0.0	24.2
1990	0.0	34.3	2.9	0.0	25.7	0.0	0.0	8.6	0.0	2.9	0.0	25.7
1991	0.0	32.4	0.0	0.0	29.4	0.0	0.0	8.8	0.0	2.9	0.0	26.5
1992	0.0	23.8	0.0	2.4	35.7	0.0	0.0	7.1	0.0	2.4	0.0	28.6

■ SOURCE: ITA

BUSINESS AIRCRAFT FLEET**TURBOPROPS (IN MIO ECUS - AT YEAR-END)****TOTAL EU - BREAKDOWN BY MEMBER STATE (%)**

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	6.9	27.2	5.1	2.6	23.1	0.2	0.8	5.2	0.0	2.4	0.3	26.2
1987	5.6	25.8	6.6	2.2	24.2	0.2	0.8	7.6	0.0	2.2	0.3	24.6
1988	5.3	24.2	6.0	2.4	28.2	0.2	0.7	7.7	0.1	2.1	0.3	22.7
1989	5.1	23.7	4.5	2.2	35.9	0.2	0.7	6.8	0.1	2.2	0.3	18.3
1990	4.5	23.6	4.0	3.0	39.8	0.2	0.7	5.2	0.1	2.3	0.2	16.4
1991	4.7	26.1	3.8	3.0	39.2	0.2	0.4	5.8	0.1	2.1	0.3	14.3
1992	4.8	28.9	4.1	3.6	38.3	0.2	0.4	4.6	0.1	2.3	0.2	12.7

MARKET SHARE OF EU-BUILT AIRCRAFT (AS % OF TOTAL)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	0.0	17.9	0.0	0.0	1.0	0.0	0.0	0.0	0.0	2.4	0.0	14.1
1987	0.0	13.8	0.0	0.0	0.9	0.0	0.0	1.2	0.0	2.1	0.0	9.8
1988	0.0	13.5	0.0	0.0	0.6	0.0	0.0	1.1	0.0	2.0	0.0	15.5
1989	0.0	12.3	7.2	0.0	0.7	0.0	0.0	1.5	0.0	1.5	0.0	11.5
1990	0.0	9.9	6.7	0.0	0.6	0.0	0.0	1.4	0.0	1.1	0.0	10.7
1991	0.0	7.6	0.0	0.0	0.6	0.0	0.0	1.2	0.0	1.1	0.0	11.9
1992	0.0	3.8	0.0	0.6	0.8	0.0	0.0	1.3	0.0	0.9	0.0	15.7

BREAKDOWN OF EU-BUILT AIRCRAFT BY EU MEMBER STATE (%)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1986	0.0	55.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.6	0.0	41.8
1987	0.0	56.3	0.0	0.0	3.6	0.0	0.0	1.5	0.0	0.7	0.0	37.9
1988	0.0	46.1	0.0	0.0	2.4	0.0	0.0	1.2	0.0	0.6	0.0	49.7
1989	0.0	50.6	5.6	0.0	4.7	0.0	0.0	1.7	0.0	0.6	0.0	36.8
1990	0.0	49.8	5.8	0.0	4.8	0.0	0.0	1.6	0.0	0.5	0.0	37.5
1991	0.0	49.4	0.0	0.0	5.6	0.0	0.0	1.7	0.0	0.6	0.0	42.7
1992	0.0	31.3	0.0	0.6	8.7	0.0	0.0	1.7	0.0	0.6	0.0	57.1

■ SOURCE: IATA

DELIVERIES OF BUSINESS AIRCRAFT (IN UNITS)

BREAKDOWN BY DESIGN ORIGIN

JETS

	1986	1987	1988	1989	1990	1991	1992
EU	25.0%	35.6%	28.6%	27.8%	23.2%	19.5%	19.8%
USA	58.7%	53.4%	59.8%	61.1%	61.6%	69.7%	69.2%
OTHER WORLD	16.3%	11.0%	11.6%	11.1%	15.1%	10.9%	10.9%
TOTAL	208	219	259	252	271	267	247

TURBOPROPS (1)

	1986	1987	1988	1989	1990	1991	1992
EU	2.7%	4.2%	5.4%	5.2%	5.9%	14.8%	21.4%
USA	92.8%	95.0%	93.5%	92.4%	91.3%	82.1%	74.5%
OTHER WORLD	4.5%	0.8%	1.1%	2.4%	2.8%	3.1%	4.2%
TOTAL	221	239	261	251	253	223	192

PISTON ENGINES (2)

	1986	1987	1988	1989	1990	1991	1992
EU	5.5%	6.1%	4.3%	3.1%	4.8%	4.2%	5.0%
USA	94.5%	93.9%	95.7%	96.9%	95.2%	95.8%	95.0%
OTHER WORLD	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
TOTAL	380	361	322	391	355	286	302

GRAND TOTAL	809	819	842	894	879	776	741
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(1) PARTENAVIA/PILATUS AIRCRAFT ONLY 6 MONTHS 1992

(2) PARTENAVIA ONLY 6 MONTHS 1992

■ SOURCE: INTERAVIA/AEROSPACE WORLD

CIVIL HELICOPTERS

The figures on the *civil and para-public helicopter fleet* in Europe and North America are provided by *EUROCOPTER INTERNATIONAL*.

The data on the *commercial helicopter fleet* (in value and units) are prepared by *ITA*. (Air Transport Institute, Paris).

The study includes the "*civil helicopters*". Therefore some helicopters used by public authorities are included while they may also be included in the *military helicopters* fleet given in chapter 4.

The analysis covers the following *geographical areas*:

- *EU*
- *Other Europe*: Austria, Cyprus, Finland, Greenland, Iceland, Liechtenstein, Malta, Monaco, Norway, Sweden, Switzerland, Turkey
- *USA*
- *Rest of the world*

Aviation Data Wichita is the source, except *Bureau Veritas* for the EU.

The value of the *civil helicopter* fleet is computed as follows:

- for *helicopters that are no longer built*, an average price is computed between the helicopter maximum price, its minimum price and its price after some improvements, between the first year of manufacturing and the last one.

- for *helicopters still in production and put into service for more than 6 years*, the average price is estimated between the new helicopter price, weighted by a factor 2, and its maximum price, its minimum price and its price after some improvements on helicopters of the first year of production.
- for *helicopters in production for 6 years or less*, the price of new helicopter is used.

The source for the table covering *civil and para-public helicopter deliveries*, is *EUROCOPTER INTERNATIONAL* again.

A list of *commercial helicopters* covered by the study is given in the following pages.

Helicopters of EU design

Manufacturer	Model	Seats	Year	Value 1992 (Mio ECUS)
<i>AEROSPATIALE</i>	Lama (SA315B)	5	1971--	0.308
	Alouette III (SA316)	7	1966-81	0.247
	Alouette II (SA318)	5	1969-75	0.085
	Alouette III (SA319)	7	1974-76	0.247
	Puma (SA330J)	18-22	1974-80	1.387
	SuperPuma (SA332C)	23	1982--	2.696
	SuperPuma (SA332L)	22	1982--	3.698
	Gazelle (SA341/342)	5	1972-80	0.162
	Ecureuil (AS350)	6	1978--	0.385
	Ecureuil/2 (AS355)	6	1981--	0.655
	Dauphin (SA360)	14	1976-80	0.416
	Dauphin/2 (SA365)	14	1977-81	0.616
	Dauphin/2 (SA365N)	14	1981--	2.080
<i>AGUSTA</i>	A109A	8	1975--	1.040
<i>MBB</i>	BO105	5	1973--	0.693
	BK117	11	1983--	1.387
<i>WESTLAND</i>	WG30	20	1983--	2.465
	Wessex60	19	1965--	0.385

Helicopters of US design

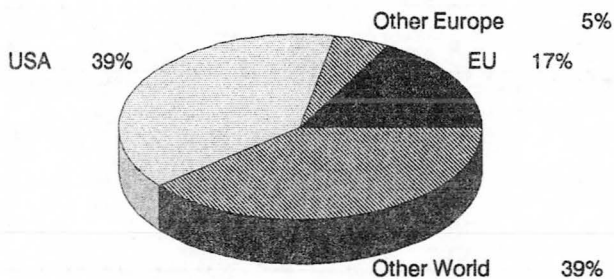
<i>AGUSTA-BELL</i>	A-B 204/205	10	1965-67	0.266
	A-B 206B	5	1966-77	0.308
	A-B 212	15	1971--	1.387
	A-B 412	15	1981--	2.388

Helicopters of US design (continued)

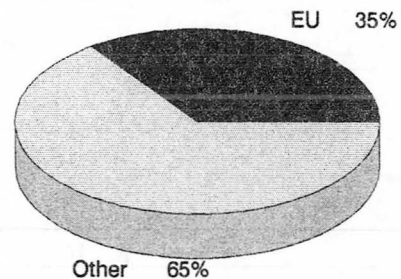
Manufacturer	Model	Seats	Year	Value 1992 (Mio ECUS)
<i>BELL</i>	B-47 (Series - incl. Agusta-Bell 47)	3-4	1957-73	0.031
	B-204B	10	1965-67	0.266
	B-205A	15	1968-80	0.516
	B-206(A/B)	5	1966--	0.308
	B-206L	7	1975--	0.462
	B-212	15	1971--	1.387
	B-214B	16	1976-81	0.924
	B-214ST	20	1982--	3.390
	B-222	8-10	1980--	0.847
	B-412	15	1981--	2.388
<i>BOEING VERTOL</i>	B-107	28	1961-65	3.852
	B-234	47	1981--	10.786
<i>ENSTRÖM</i>	F-28 (Series)	3	1966--	0.054
	F-280	3	1974--	0.073
<i>FAIRCHILD</i>	FH-1100	5	1966-72	0.065
<i>HILLER</i>	UH-12 (Series)	3-4	1959--	0.077
<i>HUGHES-McDD</i>	269/300	2-3	1961--	0.062
	369/500	7	1969--	0.270
<i>ROBINSON</i>	R-22 (Series)	2	1979--	0.058
<i>SIKORSKY</i>	S-55	12	1949-61	0.046
	S-58	20	1953-77	0.270
	S-61	30	1968-79	1.541
	S-62	12	1960-70	0.092
	S-64	3-5	1972--	4.622
	S-76A	14	1979--	2.080

Civil Helicopter Fleet

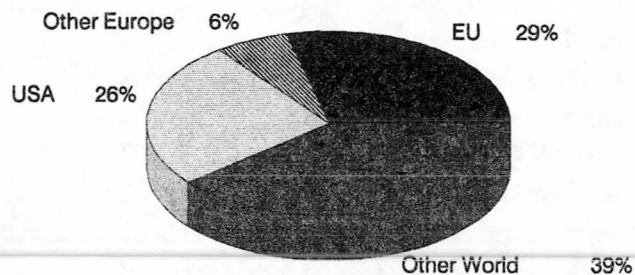
(in value - 1992)



BREAKDOWN BY AREA



EU MARKET SHARE



BREAKDOWN OF EU MARKETS

Source: ITA

CIVIL AND PARA-PUBLIC HELICOPTER FLEET - EUROPE AND NORTH AMERICA

UNITS (AT YEAR-END)

	EU				OTHER EUROPE	USA				CANADA
	TOTAL	AS % OF EU TOTAL				TOTAL	AS % OF USA TOTAL		TOTAL	
		DESIGN ORIGIN		LICENCE (*)			DESIGN ORIGIN			
		EU	USA				EU	USA		
1960	176	22.7	77.3	48.3	-	-	-	-	-	
1965	406	33.0	67.0	30.0	-	1,854	0.6	99.4	-	
1970	598	27.6	72.4	32.4	-	2,980	1.1	98.9	-	
1975	1,023	32.7	67.3	22.0	-	4,803	3.3	96.7	-	
1980	1,477	36.4	63.6	23.0	-	7,259	6.3	93.7	-	
1981	1,614	37.7	62.3	20.8	-	7,735	7.4	92.6	-	
1982	1,709	38.4	61.6	20.6	-	7,947	8.5	91.5	-	
1983	1,775	40.5	59.5	20.1	-	8,192	8.7	91.3	-	
1984	1,829	42.2	57.8	19.5	-	8,469	9.1	90.9	-	
1985	1,840	43.5	56.5	18.5	588	8,540	9.7	90.3	1,086	
1986	1,918	43.8	56.2	17.2	606	8,577	10.6	89.4	1,081	
1987	2,067	44.1	55.9	16.3	696	8,409	11.0	89.0	1,107	
1988	2,308	42.7	57.3	14.8	722	8,210	11.2	88.8	1,151	
1989	2,610	41.0	59.0	13.7	759	8,323	11.1	88.9	1,189	
1990 (1)	2,913	39.3	59.9	12.1	803	8,522	11.3	88.7	1,268	
1991 (2)	3,062	39.6	60.1	10.5	862	8,669	11.2	88.8	1,314	
1992 (3)	3,233	38.5	59.9	9.9	885	8,735	11.2	88.8	1,397	

(*) HELICOPTERS OF US DESIGN MANUFACTURED IN THE EU UNDER LICENCE

(1) INCLUDING 22 "CIS"-DESIGNED HELICOPTERS REGISTERED IN GERMANY

(2) INCLUDING 10 "CIS"-DESIGNED HELICOPTERS REGISTERED IN GERMANY

(3) INCLUDING 50 "CIS"-DESIGNED HELICOPTERS REGISTERED IN GERMANY

■ SOURCE: EUROCOPTER INTERNATIONAL

EU CIVIL AND PARA-PUBLIC HELICOPTER FLEET

UNITS (AT YEAR-END)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1960	10	14	0	0	82	0	0	32	0	3	0	35
1965	2	75	6	16	148	2	2	49	0	7	3	96
1970	13	121	11	31	155	4	6	66	0	17	1	173
1975	26	247	22	59	227	8	6	85	0	29	9	305
1980	26	334	37	68	383	18	13	133	0	26	6	433
1981	28	356	44	76	407	19	15	158	0	31	8	472
1982	26	368	41	83	451	23	14	181	0	31	7	484
1983	28	383	36	91	467	22	13	201	0	36	9	489
1984	25	399	34	92	487	25	14	218	0	39	8	488
1985	24	400	37	86	475	25	16	224	0	41	8	504
1986	27	425	37	99	496	25	15	227	0	42	11	514
1987	25	436	40	119	555	31	16	264	0	33	14	534
1988	27	430	43	131	628	31	22	315	0	32	22	627
1989	31	433	42	163	701	41	25	367	0	35	25	747
1990 (1)	35	479	46	194	791	42	31	406	0	37	29	823
1991 (2)	41	536	50	235	838	44	36	404	0	38	35	805
1992 (3)	44	641	49	249	880	40	32	445	2	41	39	771

- (1) INCLUDING 22 "CIS"-DESIGNED HELICOPTERS REGISTERED IN GERMANY
 (2) INCLUDING 10 "CIS"-DESIGNED HELICOPTERS REGISTERED IN GERMANY
 (3) INCLUDING 50 "CIS"-DESIGNED HELICOPTERS REGISTERED IN GERMANY

■ SOURCE: EUROCOPTER INTERNATIONAL

EU CIVIL AND PARA-PUBLIC HELICOPTER FLEET

MARKET SHARE OF EU-BUILT AIRCRAFT (AS % OF FLEET AT YEAR-END)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1960	0.0	7.1	-	-	41.5	-	-	6.3	-	100.0	-	0.0
1965	50.0	40.0	0.0	0.0	61.5	0.0	0.0	10.2	-	57.1	100.0	0.0
1970	38.5	30.6	0.0	9.7	63.9	50.0	33.3	7.6	-	41.2	0.0	2.9
1975	34.6	37.7	0.0	25.4	67.0	75.0	33.3	16.5	-	65.5	11.1	7.9
1980	34.6	44.6	0.0	30.9	60.1	33.3	7.7	43.6	-	53.8	0.0	11.5
1981	32.1	48.6	0.0	32.9	62.9	31.6	6.7	43.0	-	54.8	0.0	11.2
1982	34.6	46.2	0.0	32.5	62.1	30.4	7.1	42.0	-	48.4	0.0	14.7
1983	32.1	43.9	5.6	35.2	63.0	40.9	15.4	40.8	-	50.0	11.1	20.9
1984	36.0	45.1	5.9	41.3	63.0	32.0	14.3	41.7	-	48.7	12.5	23.6
1985	41.7	45.5	8.1	40.7	67.2	32.0	18.8	41.5	-	48.8	12.5	25.0
1986	40.7	44.0	10.8	44.4	66.1	24.0	20.0	45.4	-	42.9	18.2	26.3
1987	44.0	45.0	10.0	47.9	63.8	19.4	18.8	49.6	-	39.4	28.6	24.9
1988	40.7	47.2	11.6	50.4	59.1	19.4	18.2	48.3	-	31.3	59.1	23.1
1989	38.7	44.8	11.9	48.5	57.9	24.4	20.0	46.6	-	31.4	68.0	21.4
1990 (1)	34.3	40.5	13.0	45.4	55.6	26.2	16.1	46.1	-	32.4	58.6	21.1
1991 (2)	24.4	38.2	14.0	46.8	55.8	25.0	11.1	47.8	-	26.3	54.3	21.9
1992 (3)	25.0	33.5	18.4	47.8	54.9	20.0	6.3	44.7	0.0	29.3	35.9	22.4

(1) INCLUDING 22 "CIS"-DESIGNED HELICOPTERS REGISTERED IN GERMANY

(2) INCLUDING 10 "CIS"-DESIGNED HELICOPTERS REGISTERED IN GERMANY

(3) INCLUDING 50 "CIS"-DESIGNED HELICOPTERS REGISTERED IN GERMANY

■ SOURCE: EUROCOPTER INTERNATIONAL

CIVIL HELICOPTER FLEET

IN UNITS - AT YEAR-END

WORLD TOTAL - GEOGRAPHICAL BREAKDOWN

	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	11.4%	11.4%	11.5%	11.8%	13.0%	14.3%	14.9%	15.4%	15.6%
REST OF EUROPE	2.8%	3.0%	3.2%	3.4%	3.6%	3.6%	3.9%	3.8%	3.9%
USA	59.5%	58.1%	56.8%	55.2%	52.3%	51.1%	49.2%	48.3%	47.5%
OTHER WORLD	26.3%	27.4%	28.5%	29.6%	31.1%	31.1%	32.0%	32.4%	32.9%
TOTAL	15,328	16,087	16,865	17,172	17,838	18,273	19,142	20,047	20,770

MARKET SHARE OF EU-BUILT HELICOPTERS (AS % OF TOTAL)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	38.5	39.7	40.7	40.1	39.5	38.6	37.4	37.8	37.7
REST OF EUROPE	21.7	26.0	27.2	28.0	28.2	29.6	31.3	32.1	32.7
USA	10.0	10.2	10.4	10.6	10.6	11.0	11.0	11.1	10.8
OTHER WORLD	13.7	14.5	15.7	16.5	18.3	19.6	20.4	21.3	21.1
TOTAL	14.6	15.2	15.9	16.5	17.4	18.2	18.7	19.3	19.3

BREAKDOWN OF EU-BUILT HELICOPTERS INTO GEOGRAPHICAL ZONES (%)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	30.2	29.8	29.3	28.7	29.6	30.2	29.9	30.2	30.5
REST OF EUROPE	4.1	5.2	5.5	5.8	5.8	5.8	6.4	6.3	6.7
USA	40.9	39.0	37.0	35.7	31.9	30.7	28.9	27.7	26.7
OTHER WORLD	24.8	26.1	28.1	29.8	32.7	33.4	34.8	35.8	36.1

■ SOURCE: ITA

CIVIL HELICOPTER FLEET

IN UNITS - AT YEAR-END

TOTAL EU - BREAKDOWN BY MEMBER STATE (%)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1985	1.0	22.4	2.2	3.6	23.7	1.2	0.7	14.1	0.1	1.9	0.7	28.4
1986	1.0	22.4	2.0	3.6	23.7	1.3	0.8	14.6	0.0	2.0	0.7	27.9
1987	1.0	21.9	1.5	4.1	23.8	1.4	0.8	15.2	0.0	1.6	0.9	27.7
1988	0.9	18.9	1.4	5.7	25.5	1.5	1.0	15.0	0.0	1.3	0.8	28.1
1989	0.8	17.1	1.2	7.1	24.8	1.5	0.8	14.8	0.0	1.2	0.8	29.9
1990	0.8	16.3	1.5	6.2	25.8	1.2	1.1	15.0	0.0	1.2	0.9	30.0
1991	0.7	17.1	1.7	6.7	26.1	1.1	1.2	14.8	0.0	1.2	0.9	28.5
1992	0.7	18.5	1.6	7.0	26.6	1.2	1.1	15.5	0.1	1.2	1.0	25.4

MARKET SHARE OF EU-BUILT HELICOPTERS (AS % OF TOTAL)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1985	11.1	46.6	9.8	48.5	55.4	31.8	23.1	37.5	100.0	42.9	8.3	25.7
1986	15.0	46.3	7.7	47.8	55.3	32.0	25.0	41.5	-	43.6	14.3	27.0
1987	15.0	46.3	12.9	47.0	53.3	28.6	23.5	43.2	-	34.4	22.2	25.7
1988	15.0	47.2	12.1	42.4	52.5	26.5	20.8	44.5	-	32.3	22.2	23.5
1989	13.6	45.0	12.5	40.5	51.9	28.9	22.7	43.9	-	25.8	30.0	24.1
1990	13.6	43.4	14.0	42.4	51.2	27.3	15.6	43.5	-	29.4	29.6	21.9
1991	13.6	39.6	13.5	42.2	52.8	27.3	13.2	44.1	-	25.0	34.5	22.9
1992	13.6	37.7	17.0	45.3	52.1	21.1	8.1	42.2	0.0	25.6	12.1	23.6

BREAKDOWN OF EU-BUILT HELICOPTERS BY EU MEMBER STATE (%)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1985	0.3	26.3	0.5	4.4	33.1	1.0	0.4	13.3	0.1	2.1	0.1	18.4
1986	0.4	25.5	0.4	4.2	32.2	1.0	0.5	14.8	0.0	2.2	0.3	18.5
1987	0.4	25.2	0.5	4.8	31.7	1.0	0.5	16.4	0.0	1.4	0.5	17.7
1988	0.3	22.6	0.4	6.1	33.9	1.0	0.5	16.9	0.0	1.1	0.4	16.7
1989	0.3	20.0	0.4	7.5	33.4	1.1	0.5	16.8	0.0	0.8	0.6	18.7
1990	0.3	18.9	0.6	7.0	35.2	0.8	0.5	17.5	0.0	0.9	0.7	17.6
1991	0.3	17.9	0.6	7.4	36.4	0.8	0.4	17.3	0.0	0.8	0.9	17.3
1992	0.2	18.5	0.7	8.4	36.8	0.7	0.2	17.4	0.0	0.8	0.3	15.9

■ SOURCE: ITA

CIVIL HELICOPTER FLEET

IN MIO ECUS - AT YEAR-END

WORLD TOTAL - GEOGRAPHICAL BREAKDOWN

	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	17.7%	16.6%	16.8%	15.8%	16.4%	16.6%	16.6%	17.2%	17.0%
REST OF EUROPE	4.9%	4.6%	5.0%	4.8%	4.9%	4.4%	4.8%	4.6%	4.9%
USA	50.3%	51.4%	46.8%	46.9%	44.2%	43.5%	40.3%	39.0%	38.9%
OTHER WORLD	27.2%	27.4%	31.3%	32.4%	34.5%	35.5%	38.2%	39.1%	39.2%
TOTAL	7,268	7,516	7,099	6,423	6,553	7,418	7,532	8,290	8,566

MARKET SHARE OF EU-BUILT HELICOPTERS (AS % OF TOTAL)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	53.1	53.1	56.6	56.5	58.6	60.6	58.3	58.9	59.0
REST OF EUROPE	27.7	37.3	35.8	35.5	36.0	42.8	43.1	44.1	46.0
USA	16.6	16.3	19.4	19.3	19.5	20.8	21.5	23.1	23.0
OTHER WORLD	21.6	22.2	24.7	25.9	29.5	28.7	31.9	33.8	34.8
TOTAL	24.9	25.0	28.1	28.1	30.1	31.2	32.6	34.4	34.9

BREAKDOWN OF EU-BUILT HELICOPTERS INTO GEOGRAPHICAL ZONES (%)

	1984	1985	1986	1987	1988	1989	1990	1991	1992
EU	37.6	35.2	33.9	31.8	31.8	32.3	29.6	29.4	28.8
REST OF EUROPE	5.4	6.9	6.3	6.1	5.9	6.0	6.4	5.9	6.5
USA	33.5	33.5	32.3	32.2	28.6	29.0	26.6	26.2	25.7
OTHER WORLD	23.5	24.4	27.5	29.8	33.7	32.6	37.4	38.5	39.1

■ SOURCE: ITA

CIVIL HELICOPTER FLEET

IN MIO ECUS - AT YEAR-END

TOTAL EU - BREAKDOWN BY MEMBER STATE (%)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1985	0.3	15.4	3.3	2.9	12.3	0.4	0.8	10.1	0.0	4.1	0.1	50.2
1986	0.4	16.1	3.2	2.9	11.9	0.6	1.0	11.3	0.0	4.2	0.1	48.2
1987	0.4	17.6	2.4	3.3	12.2	0.6	1.0	12.7	0.0	3.0	0.3	46.5
1988	0.4	16.8	2.4	4.2	14.3	0.7	1.3	13.7	0.0	2.7	0.2	43.4
1989	0.4	16.5	2.1	5.8	15.3	0.8	0.6	16.0	0.0	2.3	0.3	40.0
1990	0.3	16.1	2.7	4.8	16.2	0.6	0.9	16.3	0.0	2.5	0.5	39.1
1991	0.3	16.7	2.8	5.7	16.2	0.5	0.9	17.1	0.0	2.2	0.5	37.1
1992	0.3	19.0	2.5	6.4	16.2	0.6	0.9	18.0	0.3	2.3	0.8	32.9

MARKET SHARE OF EU-BUILT HELICOPTERS (AS % OF TOTAL)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1985	44.2	67.7	25.2	64.1	83.8	71.2	9.1	57.6	100.0	38.7	24.7	43.3
1986	44.1	70.0	27.0	64.6	82.7	43.5	13.4	59.1	-	39.4	38.6	49.3
1987	40.8	68.0	35.7	63.4	79.9	57.4	14.3	60.9	-	28.4	42.4	48.4
1988	42.5	71.7	33.0	64.9	77.8	58.1	15.8	60.4	-	25.9	43.1	51.0
1989	44.1	65.2	35.2	63.7	75.1	66.2	37.0	57.9	-	21.9	54.9	57.8
1990	44.0	63.0	26.5	66.0	73.8	73.2	22.4	56.7	-	32.8	37.8	54.5
1991	43.2	61.0	32.7	60.0	77.0	75.4	22.8	55.4	-	26.9	45.1	56.2
1992	44.1	58.1	28.4	62.4	78.3	71.6	17.1	54.8	0.0	37.4	28.1	57.8

BREAKDOWN OF EU-BUILT HELICOPTERS BY EU MEMBER STATE (%)

	BE	DE	DK	ES	FR	HE	IR	IT	LX	NL	PO	UK
1985	0.3	19.6	1.6	3.5	19.5	0.5	0.1	10.9	0.1	3.0	0.1	40.9
1986	0.3	19.9	1.5	3.3	17.4	0.5	0.2	11.8	0.0	2.9	0.1	42.0
1987	0.3	21.1	1.5	3.7	17.3	0.6	0.3	13.7	0.0	1.5	0.2	39.9
1988	0.3	20.5	1.3	4.6	19.0	0.7	0.4	14.1	0.0	1.2	0.2	37.8
1989	0.3	17.7	1.2	6.1	18.9	0.9	0.4	15.3	0.0	0.8	0.3	38.1
1990	0.3	17.3	1.2	5.5	20.6	0.7	0.3	15.8	0.0	1.4	0.3	36.5
1991	0.2	17.3	1.6	5.8	21.2	0.7	0.3	16.1	0.0	1.0	0.4	35.4
1992	0.2	18.7	1.2	6.7	21.5	0.7	0.2	16.7	0.0	1.4	0.4	32.2

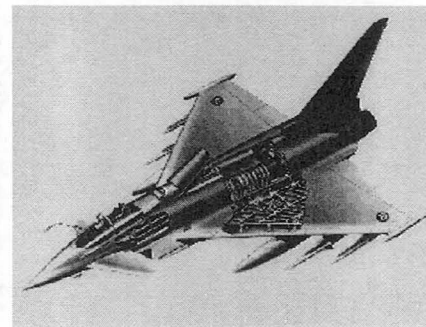
■ SOURCE: ITA

CIVIL AND PARA-PUBLIC HELICOPTER DELIVERIES (IN UNITS)**BREAKDOWN BY DESIGN ORIGIN**

	1986	1987	1988	1989	1990	1991	1992
EU	41.7%	48.1%	36.3%	29.4%	26.7%	25.5%	31.9%
USA	58.3%	51.7%	62.7%	68.5%	70.2%	72.6%	67.8%
OTHER WORLD	0.0%	0.2%	1.0%	2.1%	3.0%	2.0%	0.3%
TOTAL	640	507	620	765	1,017	962	590

■ SOURCE: EUROCOPTER INTERNATIONAL

MILITARY AIRCRAFT & TURBINE ENGINES



CHAPTER 4

MILITARY AIRCRAFT

Data relating to *military aircraft* cover the number of military aircraft in service in the world. Assessment of fleets excludes aircraft in long term storage unless replacement outstanding. Former Warsaw Pact and P.R.China fleets have been excluded throughout, however military aircraft exported by these countries have been included in the relevant category under "OTHER" design origin.

The criteria used to define a *military aircraft* is that it is not registered on a civil register. Therefore a commercial aircraft used by public authorities may be included while it is already included in the *civil transport aircraft* fleets presented in Chapters 2 or 3.

Military aircraft are broken down into the following categories:

- *Interceptor/Air Superiority*
- *Fighter/Attack*
- *Attack*
- *Bomber/Interdictor*
- *AEW/Maritime Patrol/Electronics*
- *Advanced Trainer/Light Attack*
- *Elementary/Basic Trainer*
- *Transport - Tactical/Strategic/Tanker*
- *Transport - VIP/Liaison/Communication*
- *Helicopters*

Flight refuelling tankers have been included in the tactical/strategic transport category since the majority have dual

transport role. Transports and trainers have been sub-categorised to provide more useful data.

Military aircraft are also broken down according to *design origin*: *EU*, *USA* and *OTHER*. Design origin reflects country of original design and not necessarily the country of production and/or assembly.

Military aircraft are broken down into the following geographical areas: *EU*, *Other EUR* (Austria, Serbian Bosnia, Croatia, Cyprus, Finland, Iceland, Krajina, Malta, Norway, Serbia, Slovenia, Sweden, Switzerland, Turkey), *USA*, *CANADA*, *LATIN AMERICA & CARIBBEAN*, *MIDDLE EAST & NORTH AFRICA*, *AFRICA* (south of Sahara), *REPUBLIC OF SOUTH AFRICA*, *ASIA* and *AUSTRALASIA*.

Programme unit costs have been used in estimating average unit replacement values. This method yields more indicative unit procurement costs for fleet replacements than the use of estimated flyaway costs of individual aircraft.

A list of *military aircraft* is given in the following pages.

The detailed figures on the *military helicopter* fleet in Europe and North America are provided by *EUROCOPTER INTERNATIONAL*.

Military Aircraft of EU design origin

Manufacturer	Model	Indicative price range (Mio ECUS)(*)
<i>AERMACCHI</i>	MB-339	6.32 - 9.53
<i>AEROSPATIALE</i>	Epsilon	TB-30
	Super Puma	AS-332
	Ecureuil	AS-350
	Dauphin	SA-365
<i>AGUSTA</i>	A-129	6.08 - 8.95
<i>AMX INTERNATIONAL</i>	AMX	14.20 - 16.23
<i>BRITISH AEROSPACE</i>	Hawk	10.70 - 11.56
<i>CASA</i>	C-101	Aviojet
	C-212	Aviocar
<i>DASSAULT</i>	Mirage 2000	31.79 - 41.29
	Alpha Jet	10.38 - 12.88
<i>MBB</i>	Bo-105	1.62 - 2.89
<i>PANAVIA</i>	Tornado	53.58 - 79.28
<i>SIAI-MARCHETTI</i>	S-211	3.05 - 4.13
	SF-260TP	0.76 - 1.02
<i>WESTLAND</i>	Lynx	5.82 - 6.61

* Prices quoted represent average programme unit costs of new-build aircraft in 1992. Programme unit costs comprise flyaway cost of aircraft, initial spares, ground support equipment, R&D levies and other associated costs, divided by the number of aircraft procured.

Military Aircraft of US design origin

Manufacturer	Model	Indicative price range (Mio ECUS) (*)
<i>BELL</i>	AH-1 Cobra	8.62 - 13.05
<i>BOEING</i>	CH-47C Chinook	17.36 - 20.86
<i>GRUMMAN</i>	A-6E Intruder	33.86 - 37.72
	E-2C Hawkeye	58.99 - 75.94
	F-14 Tomcat	42.99 - 61.25
<i>LOCKHEED</i>	F-16 Fighting Falcon	23.93 - 37.72
	C-130 Hercules	21.30 - 35.79
	P-3C Orion	43.57 - 60.92
<i>McDONNELL DOUGLAS</i>	AH-64 Apache	9.42 - 16.45
	F-15 Eagle	41.98 - 53.32
	F/A-18 Hornet	39.71 - 52.19
<i>SIKORSKY</i>	CH-53E Super Stallion	17.41 - 28.07
	UH-60 Blackhawk	7.83 - 17.13
	SH-60 Seahawk	18.95 - 26.66

* Prices quoted represent average programme unit costs of new-build aircraft in 1992. Programme unit costs comprise flyaway cost of aircraft, initial spares, ground support equipment, R&D levies and other associated costs, divided by the number of aircraft procured.

Military aircraft of other design origin

Manufacturer	Model	Indicative price range (Mio ECUS) (*)
<i>AERO</i>	L-59	Albatros 3.30 - 4.13
<i>EMBRAER</i>	EMB-312	Tucano 1.74 - 2.46
<i>ISRAEL AIRCRAFT INDUSTRIES</i>	Kfir 14.97 - 20.14
<i>PILATUS</i>	PC-7	Turbo-Trainer 1.52 - 2.52
	PC-9 3.06 - 3.19
<i>SAAB</i>	JAS39	Gripen 27.67- 37.16
<i>MIKOYAN</i>	MiG-29 35.47 - 44.94

* Prices quoted represent average programme unit costs of new-build aircraft in 1992. Programme unit costs comprise flyaway cost of aircraft, initial spares, ground support equipment, R&D levies and other associated costs, divided by the number of aircraft procured.

MILITARY AIRCRAFT FLEET (AT YEAR-END)

INTERCEPTOR/AIR SUPERIORITY (UNITS)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	101	0	1,226	40	0	194	0	0	24	0	1,585
1985	118	0	1,275	0	0	344	0	0	100	0	1,837
1986	139	0	1,314	0	0	335	0	0	161	0	1,949
1987	163	0	1,355	0	0	387	0	0	205	0	2,110
1988	240	0	1,310	0	0	425	0	0	254	0	2,229
1989	254	16	1,314	0	14	458	0	0	270	0	2,326
1990	331	16	1,317	0	14	521	0	0	287	0	2,486
1991	335	16	1,308	0	14	524	0	0	302	0	2,499
1992	350	15	1,313	0	14	593	0	0	308	0	2,593

FIGHTER/ATTACK (UNITS)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	3,108	1,550	3,043	173	544	2,690	420	98	3,214	91	14,931
1985	2,475	1,458	3,206	154	668	3,332	527	95	3,282	80	15,277
1986	2,239	1,466	3,250	186	675	3,135	466	94	3,328	90	14,929
1987	2,288	1,529	3,239	199	674	3,298	487	92	3,387	80	15,273
1988	2,225	1,472	3,213	217	630	3,332	472	87	3,246	62	14,956
1989	2,204	1,459	3,082	217	625	3,250	479	87	3,244	72	14,719
1990	2,233	1,473	3,142	214	641	3,217	470	75	3,233	72	14,770
1991	2,153	1,505	3,032	214	643	3,121	488	72	3,258	72	14,558
1992	1,944	1,500	2,938	213	644	2,999	443	55	3,149	71	13,956

ATTACK (UNITS)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	600	140	2,867	0	172	667	5	6	369	28	4,854
1985	476	211	2,862	0	169	743	33	6	515	22	5,037
1986	466	211	2,716	0	169	741	33	6	624	22	4,988
1987	457	195	2,633	0	168	726	40	6	685	22	4,932
1988	477	261	2,568	0	165	662	40	6	710	22	4,911
1989	481	258	2,480	0	136	648	39	6	703	21	4,772
1990	496	268	2,393	0	134	610	39	6	717	21	4,684
1991	490	266	2,176	0	134	544	39	0	725	21	4,395
1992	467	254	1,722	0	164	526	39	0	744	20	3,936

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MILITARY AIRCRAFT FLEET (AT YEAR-END)**BOMBER/INTERDICTOR (UNITS)**

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	241	4	781	0	70	122	18	7	187	32	1,462
1985	593	0	699	0	52	89	4	7	152	24	1,620
1986	647	0	729	0	51	100	0	7	125	23	1,682
1987	652	0	758	0	51	94	0	7	121	22	1,705
1988	649	0	757	0	50	94	0	7	110	22	1,689
1989	661	0	813	0	26	77	0	7	103	22	1,709
1990	735	0	808	0	21	126	0	7	103	22	1,822
1991	751	0	737	0	21	115	0	0	92	22	1,738
1992	749	0	691	0	20	149	0	0	75	22	1,706

AEW/MARITIME PATROL/ELECTRONICS (UNITS)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	220	30	1,138	46	88	12	1	7	227	43	1,812
1985	200	34	1,206	36	88	8	2	0	257	26	1,857
1986	192	42	1,206	36	82	11	4	0	255	26	1,854
1987	177	47	1,171	36	80	15	4	0	256	26	1,812
1988	179	45	1,160	36	75	15	6	0	249	26	1,791
1989	185	46	1,179	36	61	17	6	0	252	26	1,808
1990	187	46	1,161	18	70	16	6	0	262	26	1,792
1991	195	46	1,154	18	68	16	4	0	253	25	1,779
1992	186	46	1,062	19	63	16	4	0	249	25	1,670

ADVANCED TRAINER/LIGHT ATTACK (UNITS)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	813	406	1,406	172	476	451	134	212	563	99	4,732
1985	942	608	1,288	145	493	515	214	217	586	97	5,105
1986	920	575	1,241	143	524	482	185	216	573	95	4,954
1987	929	527	1,153	143	525	519	198	215	549	94	4,852
1988	921	491	1,112	143	556	539	195	214	576	91	4,838
1989	905	477	1,100	143	534	669	197	214	576	90	4,905
1990	899	458	1,101	143	538	672	200	212	561	85	4,869
1991	879	460	1,061	143	551	649	194	209	528	89	4,763
1992	826	457	1,021	143	548	660	213	208	554	81	4,711

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MILITARY AIRCRAFT FLEET (AT YEAR-END)

ELEMENTARY/BASIC TRAINER (UNITS)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	1,474	520	1,310	25	1,016	736	318	70	1,209	54	6,732
1985	1,410	496	1,204	20	1,058	846	303	50	1,255	63	6,705
1986	1,299	467	1,201	20	1,124	958	306	49	1,361	69	6,854
1987	1,324	473	1,176	20	1,126	963	284	49	1,466	72	6,953
1988	1,343	496	1,150	20	1,122	952	277	49	1,422	78	6,909
1989	1,327	485	1,164	20	1,081	976	270	49	1,410	96	6,878
1990	1,330	480	1,172	20	1,083	1,001	292	49	1,421	114	6,962
1991	1,284	488	1,123	20	1,084	1,000	283	49	1,458	130	6,919
1992	1,237	471	1,072	20	1,095	943	271	49	1,414	99	6,671

TRANSPORT - TACTICAL/STRATEGIC/TANKER (UNITS)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	679	160	2,181	59	604	444	300	51	708	95	5,281
1985	618	160	2,163	59	597	508	359	55	702	91	5,312
1986	603	145	2,186	61	626	506	338	56	737	83	5,341
1987	587	119	2,152	61	633	528	333	58	733	86	5,290
1988	583	120	2,135	61	654	524	319	58	723	89	5,266
1989	589	119	2,109	62	644	511	319	58	729	89	5,229
1990	610	118	2,107	64	638	526	320	58	735	89	5,265
1991	593	123	2,131	62	629	505	315	57	717	91	5,223
1992	592	136	2,137	56	608	518	304	51	719	88	5,209

TRANSPORT - VIP/LIAISON/COMMUNICATION (UNITS)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	877	293	891	45	759	346	349	123	753	36	4,472
1985	730	235	945	29	881	380	395	83	784	35	4,497
1986	776	231	869	28	906	389	380	83	808	36	4,506
1987	759	252	780	31	921	367	382	82	849	35	4,458
1988	747	256	771	31	889	367	384	124	824	46	4,439
1989	722	253	766	23	889	355	384	125	796	48	4,361
1990	739	235	785	25	880	363	387	101	800	48	4,363
1991	720	230	757	25	883	367	381	87	772	44	4,266
1992	711	235	784	25	879	362	368	35	772	26	4,197

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MILITARY AIRCRAFT FLEET (AT YEAR-END)

HELICOPTERS (UNITS)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	3,703	711	10,609	181	782	2,087	419	156	2,189	172	21,009
1985	4,308	1,007	10,543	184	1,170	2,574	625	153	2,800	176	23,540
1986	4,238	1,025	10,756	184	1,244	2,642	649	152	2,940	176	24,006
1987	4,123	1,043	10,454	182	1,258	2,725	717	146	2,930	169	23,747
1988	4,103	1,065	10,205	181	1,225	2,699	718	143	3,073	158	23,570
1989	4,076	1,051	10,115	178	1,282	2,658	703	143	3,118	172	23,496
1990	4,200	1,064	10,337	178	1,368	2,669	692	127	3,203	194	24,032
1991	4,255	1,076	9,379	173	1,393	2,604	681	126	3,270	193	23,150
1992	4,194	1,105	8,989	166	1,383	2,574	668	107	3,334	187	22,707

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MILITARY AIRCRAFT FLEET - TYPE : INTERCEPTOR/AIR SUPERIORITY (UNITS)

DESIGN ORIGIN : EU

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	71	0	0	0	0	30	0	0	0	0	101
1985	99	0	0	0	0	22	0	0	23	0	144
1986	120	0	0	0	0	4	0	0	40	0	164
1987	144	0	0	0	0	19	0	0	44	0	207
1988	221	0	0	0	0	19	0	0	47	0	287
1989	235	0	0	0	0	47	0	0	46	0	328
1990	292	0	0	0	0	72	0	0	46	0	410
1991	296	0	0	0	0	77	0	0	46	0	419
1992	312	0	0	0	0	77	0	0	46	0	435

DESIGN ORIGIN : USA

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	30	0	1,226	40	0	100	0	0	24	0	1,420
1985	19	0	1,275	0	0	167	0	0	69	0	1,530
1986	19	0	1,314	0	0	175	0	0	101	0	1,609
1987	19	0	1,355	0	0	172	0	0	109	0	1,655
1988	19	0	1,310	0	0	167	0	0	125	0	1,621
1989	19	0	1,314	0	0	167	0	0	143	0	1,643
1990	19	0	1,317	0	0	191	0	0	160	0	1,687
1991	19	0	1,308	0	0	213	0	0	175	0	1,715
1992	18	0	1,313	0	0	241	0	0	181	0	1,753

DESIGN ORIGIN : OTHER

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	0	0	0	0	0	64	0	0	0	0	64
1985	0	0	0	0	0	155	0	0	8	0	163
1986	0	0	0	0	0	156	0	0	20	0	176
1987	0	0	0	0	0	196	0	0	52	0	248
1988	0	0	0	0	0	239	0	0	82	0	321
1989	0	16	0	0	14	244	0	0	81	0	355
1990	20	16	0	0	14	258	0	0	81	0	389
1991	20	16	0	0	14	234	0	0	81	0	365
1992	20	15	0	0	14	275	0	0	81	0	405

EUR - NON-EU EUROPE..... ME - MIDDLE EAST AND NORTH AFRICA ASA - ASIA
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MILITARY AIRCRAFT FLEET - TYPE : FIGHTER/ATTACK (UNITS)

DESIGN ORIGIN : EU

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	1,287	342	0	0	194	369	46	98	221	91	2,648
1985	1,064	248	0	0	245	552	44	95	237	75	2,560
1986	1,023	207	0	0	249	544	37	94	188	68	2,410
1987	988	206	0	0	246	521	41	92	187	47	2,328
1988	909	206	0	0	244	507	39	87	166	5	2,163
1989	888	206	0	0	234	504	38	87	169	0	2,126
1990	903	176	0	0	241	490	38	75	181	0	2,104
1991	871	174	0	0	252	459	38	72	187	0	2,053
1992	768	174	0	0	255	383	35	55	185	0	1,855

DESIGN ORIGIN : USA

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	1,778	588	3,043	165	110	728	26	0	1,173	0	7,611
1985	1,368	650	3,194	154	119	807	21	0	1,152	5	7,470
1986	1,173	679	3,238	186	107	818	12	0	1,144	22	7,379
1987	1,257	758	3,214	199	109	879	12	0	1,146	33	7,607
1988	1,273	681	3,200	217	123	889	10	0	1,187	57	7,637
1989	1,273	695	3,082	217	140	894	8	0	1,212	72	7,593
1990	1,287	738	3,142	214	140	891	8	0	1,209	72	7,701
1991	1,239	779	3,032	214	131	927	8	0	1,209	72	7,611
1992	1,133	779	2,938	213	132	1,006	8	0	1,209	71	7,489

DESIGN ORIGIN : OTHER

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	43	620	0	8	240	1,593	348	0	1,820	0	4,672
1985	43	560	12	0	304	1,973	462	0	1,893	0	5,247
1986	43	580	12	0	319	1,773	417	0	1,996	0	5,140
1987	43	565	25	0	319	1,898	434	0	2,054	0	5,338
1988	43	585	13	0	263	1,936	423	0	1,893	0	5,156
1989	43	558	0	0	251	1,852	433	0	1,863	0	5,000
1990	43	559	0	0	260	1,836	424	0	1,843	0	4,965
1991	43	552	0	0	260	1,735	442	0	1,862	0	4,894
1992	43	547	0	0	257	1,610	400	0	1,755	0	4,612

EUR - NON-EU EUROPE..... ME - MIDDLE EAST AND NORTH AFRICA ASA - ASIA
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MILITARY AIRCRAFT FLEET - TYPE : ATTACK (UNITS)

DESIGN ORIGIN : EU

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	540	0	70	0	12	11	0	6	18	0	657
1985	374	0	116	0	11	21	16	6	52	0	596
1986	366	0	73	0	11	22	16	6	64	0	558
1987	358	0	101	0	11	22	16	6	79	0	593
1988	379	0	141	0	10	22	16	6	88	0	662
1989	386	0	173	0	9	22	15	6	97	0	708
1990	402	0	202	0	8	22	15	6	105	0	760
1991	396	0	225	0	8	22	15	0	111	0	777
1992	376	0	217	0	8	19	15	0	111	0	746

DESIGN ORIGIN : USA

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	60	0	2,797	0	92	269	0	0	100	28	3,346
1985	102	0	2,746	0	45	253	0	0	156	22	3,324
1986	100	0	2,643	0	45	253	0	0	187	22	3,250
1987	99	0	2,532	0	44	253	0	0	185	22	3,135
1988	98	0	2,427	0	42	180	0	0	179	22	2,948
1989	95	0	2,307	0	35	145	0	0	168	21	2,771
1990	94	0	2,191	0	35	117	0	0	174	21	2,632
1991	94	0	1,951	0	35	115	0	0	178	21	2,394
1992	91	0	1,505	0	65	120	0	0	199	20	2,000

DESIGN ORIGIN : OTHER

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	0	140	0	0	68	387	5	0	251	0	851
1985	0	211	0	0	113	469	17	0	307	0	1,117
1986	0	211	0	0	113	466	17	0	373	0	1,180
1987	0	195	0	0	113	451	24	0	421	0	1,204
1988	0	261	0	0	113	460	24	0	443	0	1,301
1989	0	258	0	0	92	481	24	0	438	0	1,293
1990	0	268	0	0	91	471	24	0	438	0	1,292
1991	0	266	0	0	91	407	24	0	436	0	1,224
1992	0	254	0	0	91	387	24	0	434	0	1,190

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MILITARY AIRCRAFT FLEET - TYPE : BOMBER/INTERDICTOR (UNITS)

DESIGN ORIGIN : EU

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	241	0	17	0	59	0	13	7	87	12	436
1985	593	0	0	0	52	0	1	7	72	0	725
1986	647	0	0	0	51	6	0	7	45	0	756
1987	652	0	0	0	51	20	0	7	45	0	775
1988	649	0	0	0	50	20	0	7	38	0	764
1989	661	0	0	0	26	23	0	7	37	0	754
1990	735	0	0	0	21	38	0	7	37	0	838
1991	751	0	0	0	21	45	0	0	37	0	854
1992	749	0	0	0	20	45	0	0	20	0	834

DESIGN ORIGIN : USA

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	0	0	764	0	11	0	0	0	0	20	795
1985	0	0	699	0	0	0	0	0	0	24	723
1986	0	0	729	0	0	0	0	0	0	23	752
1987	0	0	758	0	0	0	0	0	0	22	780
1988	0	0	757	0	0	0	0	0	0	22	779
1989	0	0	813	0	0	0	0	0	0	22	835
1990	0	0	808	0	0	0	0	0	0	22	830
1991	0	0	737	0	0	0	0	0	0	22	759
1992	0	0	691	0	0	0	0	0	0	22	713

DESIGN ORIGIN : OTHER

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	0	4	0	0	0	122	5	0	100	0	231
1985	0	0	0	0	0	89	3	0	80	0	172
1986	0	0	0	0	0	94	0	0	80	0	174
1987	0	0	0	0	0	74	0	0	76	0	150
1988	0	0	0	0	0	74	0	0	72	0	146
1989	0	0	0	0	0	54	0	0	66	0	120
1990	0	0	0	0	0	88	0	0	66	0	154
1991	0	0	0	0	0	70	0	0	55	0	125
1992	0	0	0	0	0	104	0	0	55	0	159

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MILITARY AIRCRAFT FLEET - TYPE : AEW/MARITIME PATROL/ELECTRONICS (UNITS)

DESIGN ORIGIN : EU

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	182	0	0	0	2	0	1	7	16	0	208
1985	173	0	41	0	2	0	1	0	21	0	238
1986	165	0	41	0	1	0	3	0	21	0	231
1987	149	0	41	0	0	0	3	0	21	0	214
1988	149	0	41	0	0	0	3	0	21	0	214
1989	149	0	41	0	0	0	3	0	22	0	215
1990	151	0	41	0	0	0	3	0	22	0	217
1991	149	0	41	0	0	0	3	0	22	0	215
1992	140	0	41	0	0	0	3	0	22	0	206

DESIGN ORIGIN : USA

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	38	30	1,138	36	68	12	0	0	184	43	1,549
1985	27	30	1,165	36	69	8	0	0	194	26	1,555
1986	27	42	1,165	36	64	11	0	0	193	26	1,564
1987	28	47	1,130	36	63	15	0	0	201	26	1,546
1988	30	45	1,119	36	58	15	0	0	196	26	1,525
1989	36	46	1,138	36	44	17	0	0	192	26	1,535
1990	36	46	1,120	18	43	16	0	0	202	26	1,507
1991	46	46	1,113	18	41	16	0	0	193	25	1,498
1992	46	46	1,021	19	36	16	0	0	194	25	1,403

DESIGN ORIGIN : OTHER

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	0	0	0	10	18	0	0	0	27	0	55
1985	0	4	0	0	17	0	1	0	42	0	64
1986	0	0	0	0	17	0	1	0	41	0	59
1987	0	0	0	0	17	0	1	0	34	0	52
1988	0	0	0	0	17	0	3	0	32	0	52
1989	0	0	0	0	17	0	3	0	38	0	58
1990	0	0	0	0	27	0	3	0	38	0	68
1991	0	0	0	0	27	0	1	0	38	0	66
1992	0	0	0	0	27	0	1	0	33	0	61

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MILITARY AIRCRAFT FLEET - TYPE : ADVANCED TRAINER/LIGHT ATTACK (UNITS)

DESIGN ORIGIN : EU

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	498	38	0	0	218	112	74	212	26	99	1,277
1985	777	83	0	0	225	187	119	217	47	97	1,752
1986	772	82	0	0	227	182	113	216	42	95	1,729
1987	779	82	0	0	225	197	114	215	26	94	1,732
1988	771	81	2	0	226	228	119	214	26	91	1,758
1989	755	80	2	0	218	226	110	214	25	90	1,720
1990	749	61	4	0	221	218	110	212	25	85	1,685
1991	743	64	4	0	220	217	107	209	25	89	1,678
1992	690	64	16	0	216	222	114	208	39	81	1,650

DESIGN ORIGIN : USA

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	315	130	1,406	70	226	12	10	0	360	0	2,529
1985	165	155	1,288	64	221	0	0	0	327	0	2,220
1986	148	126	1,241	64	252	0	0	0	309	0	2,140
1987	150	111	1,153	64	255	0	0	0	283	0	2,016
1988	150	105	1,110	64	279	0	0	0	283	0	1,991
1989	150	105	1,098	64	274	0	0	0	283	0	1,974
1990	150	105	1,097	64	272	0	0	0	248	0	1,936
1991	136	105	1,057	64	280	0	0	0	203	0	1,845
1992	136	105	1,005	64	286	0	0	0	183	0	1,779

DESIGN ORIGIN : OTHER

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	0	238	0	102	32	327	50	0	177	0	926
1985	0	370	0	81	47	328	95	0	212	0	1,133
1986	0	367	0	79	45	300	72	0	222	0	1,085
1987	0	334	0	79	45	322	84	0	240	0	1,104
1988	0	305	0	79	51	311	76	0	267	0	1,089
1989	0	292	0	79	42	443	87	0	268	0	1,211
1990	0	292	0	79	45	454	90	0	288	0	1,248
1991	0	291	0	79	51	432	87	0	300	0	1,240
1992	0	288	0	79	46	438	99	0	332	0	1,282

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MILITARY AIRCRAFT FLEET - TYPE : ELEMENTARY/BASIC TRAINER (UNITS)

DESIGN ORIGIN : EU

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	965	125	0	0	16	300	140	0	121	0	1,667
1985	973	98	0	0	44	332	147	0	139	0	1,733
1986	900	70	0	0	41	410	153	0	155	0	1,729
1987	928	69	0	0	41	408	152	0	188	0	1,786
1988	920	68	0	0	41	396	147	0	204	0	1,776
1989	890	68	0	0	41	398	150	0	189	0	1,736
1990	846	68	0	0	43	398	149	0	197	0	1,701
1991	818	101	0	0	43	363	144	0	215	0	1,684
1992	750	108	0	0	45	364	142	0	210	0	1,619

DESIGN ORIGIN : USA

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	324	136	1,310	25	670	70	79	70	372	0	3,056
1985	260	137	1,204	20	539	70	64	50	289	0	2,633
1986	224	137	1,201	20	512	70	61	49	309	0	2,583
1987	222	143	1,176	20	474	70	49	49	292	0	2,495
1988	208	168	1,150	20	461	57	49	49	263	0	2,425
1989	207	168	1,164	20	407	70	42	49	254	0	2,381
1990	205	168	1,172	20	389	70	42	49	253	0	2,368
1991	187	168	1,118	20	386	90	40	49	253	0	2,311
1992	165	168	1,072	20	395	70	38	49	239	0	2,216

DESIGN ORIGIN : OTHER

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	185	259	0	0	330	366	99	0	716	54	2,009
1985	177	261	0	0	475	444	92	0	827	63	2,339
1986	175	260	0	0	571	478	92	0	897	69	2,542
1987	174	261	0	0	611	485	83	0	986	72	2,672
1988	215	260	0	0	620	499	81	0	955	78	2,708
1989	230	249	0	0	633	508	78	0	967	96	2,761
1990	279	244	0	0	651	533	101	0	971	114	2,893
1991	279	219	5	0	655	547	99	0	990	130	2,924
1992	322	195	0	0	655	509	91	0	965	99	2,836

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MILITARY AIRCRAFT FLEET - TYPE : TRANSPORT - TACTICAL/STRATEGIC/TANKER (UNITS)

DESIGN ORIGIN : EU

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	469	31	0	0	83	61	59	10	105	27	845
1985	420	31	21	0	125	87	94	10	138	29	955
1986	404	31	25	0	130	78	80	9	150	20	927
1987	385	33	27	0	132	81	87	9	147	24	925
1988	390	33	28	0	136	80	85	9	150	25	936
1989	391	33	28	0	139	79	87	9	148	25	939
1990	390	33	27	0	141	86	86	9	150	25	947
1991	396	34	37	0	136	86	89	8	154	28	968
1992	401	37	46	0	133	85	92	8	159	25	986

DESIGN ORIGIN : USA

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	198	94	2,128	43	332	247	144	41	398	46	3,671
1985	167	88	2,114	43	272	256	128	45	298	43	3,454
1986	169	73	2,150	45	228	262	118	47	271	44	3,407
1987	172	63	2,114	45	224	267	113	49	281	43	3,371
1988	163	61	2,096	45	238	270	111	49	257	45	3,335
1989	168	61	2,070	44	224	267	111	49	228	45	3,267
1990	169	61	2,069	44	219	274	111	49	235	45	3,276
1991	170	64	2,083	42	219	273	106	49	231	44	3,281
1992	175	68	2,086	44	203	290	97	43	235	44	3,285

DESIGN ORIGIN : OTHER

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	12	35	53	16	189	136	97	0	205	22	765
1985	31	41	28	16	200	165	137	0	266	19	903
1986	30	41	11	16	268	166	140	0	316	19	1,007
1987	30	23	11	16	277	180	133	0	305	19	994
1988	30	26	11	16	280	174	123	0	316	19	995
1989	30	25	11	18	281	165	121	0	353	19	1,023
1990	51	24	11	20	278	166	123	0	350	19	1,042
1991	27	25	11	20	274	146	120	0	332	19	974
1992	16	31	5	12	272	143	115	0	325	19	938

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MILITARY AIRCRAFT FLEET - TYPE : TRANSPORT - VIP/LIAISON/COMMUNICATION (UNITS)

DESIGN ORIGIN : EU

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	673	33	0	7	39	105	170	62	45	6	1,140
1985	552	38	3	7	55	81	211	26	61	2	1,036
1986	564	38	3	7	58	89	198	26	63	3	1,049
1987	536	34	3	6	57	75	198	26	73	3	1,011
1988	529	36	3	6	58	73	198	63	68	3	1,037
1989	539	35	4	0	58	72	198	63	66	5	1,040
1990	542	35	9	0	57	73	199	39	74	5	1,033
1991	527	35	4	0	56	74	195	39	77	5	1,012
1992	519	40	5	0	56	71	194	7	76	5	973

DESIGN ORIGIN : USA

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	186	195	881	0	445	199	134	30	418	0	2,488
1985	122	102	930	0	531	224	150	27	412	2	2,500
1986	157	98	854	0	553	227	154	27	420	2	2,492
1987	157	97	766	0	563	225	156	26	419	3	2,412
1988	156	99	757	0	580	227	158	26	412	3	2,418
1989	124	97	751	0	606	218	157	27	418	3	2,401
1990	126	97	765	2	605	225	158	27	419	3	2,427
1991	123	94	742	2	605	227	160	27	415	0	2,395
1992	125	89	766	2	617	225	148	28	417	0	2,417

DESIGN ORIGIN : OTHER

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	18	65	10	38	275	42	45	31	290	30	844
1985	56	95	12	22	295	75	34	30	311	31	961
1986	55	95	12	21	295	73	28	30	325	31	965
1987	66	121	11	25	301	67	28	30	357	29	1,035
1988	62	121	11	25	251	67	28	35	344	40	984
1989	59	121	11	23	225	65	29	35	312	40	920
1990	71	103	11	23	218	65	30	35	307	40	903
1991	70	101	11	23	222	66	26	21	280	39	859
1992	67	106	13	23	206	66	26	0	279	21	807

EUR - NON-EU EUROPE..... ME - MIDDLE EAST AND NORTH AFRICA ASA - ASIA
 CAN - CANADA..... AFR - AFRICA SOUTH OF SAHARA AUS - AUSTRALASIA
 LAT - LATIN AMERICA AND CARIBBEAN..... SAF - REPUBLIC OF SOUTH AFRICA

MILITARY AIRCRAFT FLEET - TYPE : HELICOPTERS (UNITS)

DESIGN ORIGIN : EU

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	2,159	261	0	0	203	396	219	156	466	23	3,883
1985	2,553	360	22	0	288	656	335	153	562	49	4,978
1986	2,524	379	50	0	331	679	338	152	571	49	5,073
1987	2,462	388	86	0	358	729	343	146	589	48	5,149
1988	2,453	405	90	0	366	697	328	143	622	37	5,141
1989	2,433	395	69	0	396	673	320	143	635	38	5,102
1990	2,466	398	96	0	439	664	322	127	641	38	5,191
1991	2,494	409	96	1	454	626	319	126	659	36	5,220
1992	2,513	415	95	1	443	608	318	107	654	35	5,189

DESIGN ORIGIN : USA

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	1,544	388	10,609	181	525	1,242	112	0	1,426	149	16,176
1985	1,755	573	10,521	184	746	1,412	167	0	1,842	127	17,327
1986	1,714	573	10,706	184	771	1,458	176	0	1,926	127	17,635
1987	1,661	571	10,368	182	755	1,464	177	0	1,891	121	17,190
1988	1,650	576	10,115	181	716	1,444	178	0	1,929	121	16,910
1989	1,643	572	10,046	178	716	1,429	183	0	1,982	134	16,883
1990	1,654	581	10,241	178	742	1,450	177	0	2,052	156	17,231
1991	1,682	584	9,283	172	744	1,447	171	0	2,109	157	16,349
1992	1,640	605	8,894	165	747	1,434	163	0	2,150	152	15,950

DESIGN ORIGIN : OTHER

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	0	62	0	0	54	449	88	0	297	0	950
1985	0	74	0	0	136	506	123	0	396	0	1,235
1986	0	73	0	0	142	505	135	0	443	0	1,298
1987	0	84	0	0	145	532	197	0	450	0	1,408
1988	0	84	0	0	143	558	212	0	522	0	1,519
1989	0	84	0	0	170	556	200	0	501	0	1,511
1990	80	85	0	0	187	555	193	0	510	0	1,610
1991	79	83	0	0	195	531	191	0	502	0	1,581
1992	41	85	0	0	193	532	187	0	530	0	1,568

EUR - NON-EU EUROPE..... ME - MIDDLE EAST AND NORTH AFRICA ASA - ASIA
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AVERAGE UNIT REPLACEMENT VALUE OF MILITARY AIRCRAFT IN SERVICE IN THE EU (MIO ECUS)

DESIGN ORIGIN : EU

	I/AS	F/A	ATT	B/I	AEW	AT/LA	E/B T	T/S/T	V/L/C	HEL
1980	24.14	10.93	11.67	21.89	16.84	4.17	0.65	8.75	0.75	0.93
1985	36.41	23.78	26.72	39.73	39.61	9.30	1.44	15.43	2.35	2.33
1986	37.78	25.26	29.97	42.66	42.01	10.98	1.49	16.43	2.42	2.56
1987	39.83	26.58	36.16	45.78	46.60	11.41	1.52	18.27	2.69	2.69
1988	42.41	30.72	39.29	47.89	47.77	11.79	1.75	19.36	3.38	2.89
1989	44.49	31.51	40.29	49.51	55.77	11.99	1.80	20.86	3.47	2.93
1990	39.70	28.12	31.29	44.18	49.77	10.70	1.39	18.61	2.69	2.61
1991	45.30	32.09	35.71	50.41	56.79	12.21	1.59	21.24	3.07	2.98
1992	42.71	31.75	40.97	54.76	57.57	12.39	1.66	21.60	4.23	4.59

DESIGN ORIGIN : USA

	I/AS	F/A	ATT	B/I	AEW	AT/LA	E/B T	T/S/T	V/L/C	HEL
1980	16.02	11.36	9.34	-	19.17	4.33	0.55	10.28	0.32	1.77
1985	42.21	27.16	29.11	-	64.78	8.88	1.05	22.77	1.86	5.91
1986	44.21	28.99	30.48	-	68.74	10.41	1.14	23.57	1.89	6.14
1987	46.31	30.20	32.32	-	76.56	10.63	1.15	24.30	1.94	6.54
1988	49.47	31.24	32.86	-	78.22	11.24	1.33	27.23	2.10	7.42
1989	50.81	32.09	36.78	-	79.34	11.55	1.36	27.70	2.16	7.51
1990	44.90	28.36	32.50	-	70.12	8.78	1.17	24.48	1.64	6.64
1991	50.62	31.97	36.64	-	79.05	9.90	1.32	27.60	1.85	7.49
1992	46.25	32.82	35.61	-	80.52	10.79	1.47	28.80	2.83	9.72

DESIGN ORIGIN : OTHER

	I/AS	F/A	ATT	B/I	AEW	AT/LA	E/B T	T/S/T	V/L/C	HEL
1980	-	11.18	-	-	-	-	0.40	4.68	0.52	-
1985	-	29.98	-	-	-	-	1.03	9.98	2.22	-
1986	-	31.93	-	-	-	-	1.09	10.60	3.62	-
1987	-	34.30	-	-	-	-	1.21	11.20	3.68	-
1988	-	38.38	-	-	-	-	1.23	12.05	4.13	-
1989	-	39.06	-	-	-	-	1.26	12.42	4.25	-
1990	34.61	34.94	-	-	-	-	1.13	9.64	3.30	5.28
1991	39.18	39.55	-	-	-	-	1.28	10.91	3.74	5.98
1992	39.64	28.90	-	-	-	-	1.50	12.39	3.77	6.54

I/AS .. INTERCEPTOR/AIR SUPERIORITY F/A ... FIGHTER/ATTACK ATT ... ATTACK
 B/I ... BOMBER/INTERDICTION AT/LA . ADVANCED TRAINER/LIGHT ATTACK . HEL ... HELICOPTERS
 AEW ... AEW/MARITIME PATROL/ELECTRONICS..... E/B T . ELEMENTARY/BASIC TRAINER
 T/S/T . TRANSPORT - TACTICAL/STRATEGIC/TANKER . V/L/C . TRANSPORT - VIP/LIAISON/COMMUNICATION

MILITARY HELICOPTER FLEET - EUROPE AND NORTH AMERICA

UNITS (AT YEAR-END)

	EU				OTHER EUROPE	USA			CANADA
	TOTAL	AS % OF EU TOTAL				TOTAL	AS % OF USA TOTAL		
		DESIGN ORIGIN		LICENCE (*)			DESIGN ORIGIN		
		EU	USA				EU	USA	
1960	1,742	35.3	64.7	41.4	123	4,423	0.0	100.0	43
1965	2,478	41.3	58.7	38.3	220	6,185	0.0	100.0	90
1970	3,335	37.2	62.8	39.9	417	15,874	0.0	100.0	87
1975	3,637	43.6	56.4	37.2	746	15,338	0.0	100.0	183
1980	3,559	55.9	44.1	26.0	1,662	8,749	0.0	100.0	173
1981	3,665	57.0	43.0	25.0	1,670	8,190	0.0	100.0	182
1982	3,743	58.1	41.9	24.3	1,703	7,640	0.0	100.0	186
1983	3,863	60.1	39.9	23.2	1,734	7,760	0.0	100.0	186
1984	3,894	61.2	38.8	22.2	1,744	7,848	0.0	100.0	186
1985	3,917	61.3	38.7	22.5	1,812	7,658	0.0	100.0	185
1986	3,977	61.5	38.5	22.8	1,835	7,646	0.0	100.0	185
1987	3,961	61.0	39.0	23.2	1,791	7,924	0.0	100.0	184
1988	4,018	58.3	41.7	26.1	1,845	8,019	0.0	100.0	183
1989	4,059	59.0	41.0	25.5	1,880	7,817	0.0	100.0	183
1990 (1)	4,052	58.7	40.1	24.6	1,859	7,783	0.0	100.0	183
1991 (2)	4,088	58.6	40.2	24.8	1,890	7,957	0.0	100.0	176
1992 (3)	4,045	60.0	38.7	22.8	1,974	7,625	0.0	100.0	175

(*) HELICOPTERS OF US DESIGN MANUFACTURED IN THE EU UNDER LICENCE

(1) INCLUDING 50 "CIS"-DESIGNED HELICOPTERS BASED IN GERMANY

(2) INCLUDING 50 "CIS"-DESIGNED HELICOPTERS BASED IN GERMANY

(3) INCLUDING 50 "CIS"-DESIGNED HELICOPTERS BASED IN GERMANY

■ SOURCE: EUROCOPTER INTERNATIONAL

MILITARY HELICOPTER FLEET IN THE EU

UNITS (AT YEAR-END)

	BE	DE	DK	ES	FR	HE	IR	IT	LU	NL	PO	UK
1960	10	243	14	27	801	7	0	98	0	49	2	491
1965	43	490	25	39	758	7	3	227	0	90	32	764
1970	80	765	17	75	734	55	3	352	0	98	126	1,030
1975	79	714	32	196	805	64	8	548	0	91	113	987
1980	80	701	35	253	812	141	9	495	0	124	62	847
1981	80	742	33	303	829	126	11	493	0	122	62	864
1982	80	831	29	311	847	122	11	506	0	120	62	824
1983	79	915	29	310	860	116	10	514	0	120	62	848
1984	79	932	29	312	903	116	10	515	0	118	62	818
1985	78	922	28	308	922	128	10	509	0	117	64	831
1986	74	913	28	305	937	142	15	528	0	117	87	831
1987	73	915	29	311	953	140	15	543	0	117	39	826
1988	69	913	28	322	929	140	15	584	0	118	42	858
1989	68	913	29	323	954	140	15	596	0	118	41	862
1990 (1)	68	968	41	325	926	140	15	583	0	116	41	829
1991 (2)	68	968	41	324	935	140	15	612	0	116	43	826
1993 (3)	60	926	41	288	950	160	15	623	0	114	45	823

(1) INCLUDING 50 "CIS"-DESIGNED HELICOPTERS BASED IN GERMANY

(2) INCLUDING 50 "CIS"-DESIGNED HELICOPTERS BASED IN GERMANY

(3) INCLUDING 50 "CIS"-DESIGNED HELICOPTERS BASED IN GERMANY

■ SOURCE: EUROCOPTER INTERNATIONAL

MILITARY HELICOPTER FLEET IN THE EU

MARKET SHARE OF EU-BUILT AIRCRAFT (AS % OF FLEET AT YEAR-END)

	BE	DE	DK	ES	FR	HE	IR	IT	LU	NL	PO	UK
1960	100.0	65.8	35.7	44.4	38.3	0.0	-	0.0	-	16.3	100.0	22.6
1965	88.4	60.2	32.0	0.0	49.3	0.0	100.0	0.0	-	63.3	96.9	28.4
1970	90.0	33.5	47.1	0.0	61.6	0.0	100.0	0.0	-	85.7	99.2	23.2
1975	89.9	36.3	25.0	4.6	83.5	6.3	100.0	3.6	-	92.3	100.0	34.1
1980	93.8	40.4	37.1	12.6	100.0	2.8	100.0	1.0	-	100.0	100.0	67.3
1981	93.8	43.7	36.4	20.8	100.0	3.2	100.0	1.0	-	100.0	100.0	67.5
1982	93.8	49.8	27.6	28.0	100.0	3.3	100.0	1.0	-	100.0	100.0	65.9
1983	93.7	54.4	27.6	31.0	100.0	3.4	100.0	1.0	-	100.0	100.0	69.0
1984	93.7	55.3	27.6	31.4	100.0	3.4	100.0	1.0	-	100.0	100.0	71.9
1985	88.5	54.9	25.0	31.5	100.0	3.1	100.0	0.8	-	100.0	100.0	72.4
1986	93.2	54.5	25.0	31.8	100.0	2.8	100.0	3.2	-	100.0	100.0	71.8
1987	93.2	54.6	27.6	31.8	100.0	2.9	100.0	3.1	-	100.0	100.0	72.0
1988	92.8	54.7	25.0	33.5	100.0	2.9	100.0	7.0	-	100.0	100.0	59.9
1989	92.6	54.7	24.1	34.4	100.0	2.9	100.0	8.9	-	100.0	100.0	61.5
1990 (1)	92.6	52.1	29.3	34.8	100.0	2.9	100.0	9.9	-	100.0	100.0	63.4
1991 (2)	92.6	52.1	29.3	34.0	100.0	2.9	100.0	11.1	-	100.0	100.0	63.4
1993 (3)	100.0	52.8	46.3	37.5	100.0	15.0	100.0	10.9	-	100.0	100.0	65.2

(1) INCLUDING 50 "CIS"-DESIGNED HELICOPTERS BASED IN GERMANY

(2) INCLUDING 50 "CIS"-DESIGNED HELICOPTERS BASED IN GERMANY

(3) INCLUDING 50 "CIS"-DESIGNED HELICOPTERS BASED IN GERMANY

■ SOURCE: EUROCOPTER INTERNATIONAL

MILITARY TURBINE ENGINES

Data relating to *military engines* cover the number of *turbine aircraft engines in military service* in the world. Allowance has been made for spare engines held in reserve. Former Warsaw Pact and P.R.China fleets have been excluded throughout, however engines exported by these countries have been included in the relevant category under "OTHER" design origin.

Military engines are broken down according to: *category of engines, design origin and geographical areas.*

Military engines are broken down into the following *take-off thrust categories*:

- *Turbofan* above 14 Tons (*)
- *Turbofan* between 7 and 14 Tons (*)
- *Turbofan* between 3 and 7 Tons (*)
- *Turbofan* below 3 Tons (*)
- *Turbojet* between 7 and 14 Tons (*)
- *Turbojet* between 3 and 7 Tons (*)
- *Turbojet* below 3 Tons (*)
- *Turboprop*
- *Turboshaft*

(*)Maximum thrust, including reheat where applicable

Military engines are also broken down according to *design origin: EU, USA and OTHER*. Design origin reflects country of original design (or significant re-design) and not necessarily the country of production and/or assembly.

Military engines are also broken down according to *manufacturer*:

- *CFM International* ● *General Electric* ● *Pratt & Whitney*
- *Rolls-Royce* ● *SNECMA* ● *Turbo-Union*
- *Other*

Manufacturer reflects the company which originated the design (or has significantly re-designed /developed the engine) and does not necessarily indicate production/assembly origin.

Military engines are broken down into the following *geographical areas*:

- *EU*
- *Other EUR*:Austria, Serbian Bosnia, Croatia, Cyprus, Finland, Iceland, Krajina, Malta, Norway, Serbia, Slovenia, Sweden, Switzerland, Turkey
- *USA*
- *Canada*
- *Latin America and Caribbean*
- *Middle East and North Africa*
- *Africa* (south of Sahara)
- *Republic of South Africa*
- *Asia*
- *Australasia*

A list of *military engines* is given in the following pages.

Turbine Aircraft Engines In Military Service

	EU Design	USA Design	Other Design
Turbofans	<i>CFM Int'l</i> CFM-56(*)	<i>AVCO LYCOMING</i>ALF502	<i>IHI</i> F-3
	<i>ROLLS-ROYCE</i> Conway	<i>GARRETT</i>ATF3	<i>IVCHENKO</i> AI-25
	M54H	TFE731	<i>KUZNETOV</i> NK-8
	Pegasus	<i>GENERAL ELECTRIC</i> ..CF6	<i>P&W CANADA</i> JT15D
	RB-211	CF34 (TF34)	<i>SOLOVIEV</i> D20
	Spey	CF700	D30
	Tay	F101, F110	<i>TUMANSKY</i> R29
	<i>R-R/TURBOMECA</i> Adour	F118, F404	R33
	<i>SNECMA</i> M53	TF39	
	M88	<i>PRATT & WHITNEY</i> ...F100	
	<i>SNECMA/TURBOMECA</i> Larzac	JT3D (TF33)	
	<i>TURBOMECA</i> Aubisque	JT8D	
<i>TURBO-UNION</i> RB-199	JT9D		
	TF30		
Turbojets	<i>ROLLS-ROYCE</i> Avon	<i>ALLISON</i>J33	<i>IHI</i> J-3
	Nene	<i>FAIRCHILD</i>J44	<i>INSTYTUT LOTNICTWA</i> SO-3
	Orpheus	<i>GENERAL ELECTRIC</i> ..CJ610	<i>KLIMOV</i> VK-1
	Viper	CJ805	<i>KOLIEV</i> VD-7
	<i>SNECMA</i> Atar	J47	<i>LYULKA</i> AL-7F
	<i>TURBOMECA</i> Mabore	J79	AL-21F
		J85	<i>MIKULIN</i> AM-3

* Joint EU/USA design

Turbine Aircraft Engines In Military Service

	EU Design	USA Design	Other Design
Turbojets (continued)		<i>PRATT & WHITNEY</i> ... J52	<i>MOTORLET</i> M701
		J57	<i>TUMANSKY</i> RD9
		J58	R13
		J75	RU19
		JT12 (J60)	R25
		<i>TELEDYNE</i> J69	R31
	<i>WRIGHT</i> J65		
Turboprops	<i>NAPIER</i> Eland	<i>ALLISON</i> 250	<i>IVCHENKO</i> AI-20
	<i>ROLLS-ROYCE</i> Dart	501 (T56)	AI-24
	Tyne	<i>AVCO LYCOMING</i> T53	<i>P&W CANADA</i> PT-6A
	<i>TURBOMECA</i> Astazou	LTP101	<i>WALTER</i> M601
	Bastan	<i>GARRETT</i> TPE331 (T76)	
		<i>GENERAL ELECTRIC</i> .. CT7	
	T64		
Turboshafts	<i>NAPIER</i> Gazelle	<i>ALLISON</i> 250 (T63)	<i>GLUSHENKOV</i> GTD-3
	<i>ROLLS-ROYCE</i> Gem	<i>AVCO LYCOMING</i> LTC4	TVD-10
	Gnome	LTS101	<i>ISOTOV</i> GTD-350
	Nimbus	T53	TV-2
	<i>TURBOMECA</i> Arriel	T55	TV-3
	Artouste	<i>GENERAL ELECTRIC</i> .. T58	<i>LOTAREV</i> D-136
	Astazou	T64	<i>P&W CANADA</i> PT-6T
	Makila	T700	<i>SOLOVIEV</i> D-25
	Turmo	<i>PRATT & WHITNEY</i> ... T73	

MILITARY TURBINE ENGINES INVENTORY

TURBOFAN - MAXIMUM THRUST ABOVE 14 TONS (UNITS IN SERVICE AT YEAR-END)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1975	0	0	372	0	0	51	0	0	0	0	423
1980	0	0	376	0	0	46	0	0	0	0	422
1985	14	0	512	0	0	28	0	0	0	0	554
1986	24	0	590	0	0	28	0	0	0	0	642
1987	24	0	673	0	4	32	0	0	0	0	733
1988	24	0	783	0	4	32	0	0	0	0	843
1989	28	0	802	0	7	32	0	0	0	0	869
1990	31	0	812	0	7	32	0	0	0	0	882
1991	39	0	817	0	7	32	0	0	16	0	911
1992	39	0	835	5	10	32	0	0	13	0	934

MARKET SHARE OF ENGINES OF EU DESIGN ORIGIN (AS % OF TOTAL)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1975	-	-	0.0	-	-	0.0	-	-	-	-	0.0
1980	-	-	0.0	-	-	0.0	-	-	-	-	0.0
1985	100.0	-	0.0	-	-	17.9	-	-	-	-	3.4
1986	100.0	-	0.0	-	-	17.9	-	-	-	-	4.5
1987	100.0	-	0.0	-	0.0	28.1	-	-	-	-	4.5
1988	100.0	-	0.0	-	0.0	28.1	-	-	-	-	3.9
1989	100.0	-	0.0	-	42.9	28.1	-	-	-	-	4.6
1990	100.0	-	0.0	-	42.9	28.1	-	-	-	-	4.9
1991	79.5	-	0.0	-	42.9	28.1	-	-	0.0	-	4.7
1992	79.5	-	0.0	0.0	60.0	28.1	-	-	0.0	-	4.9

EUR - NON-EU EUROPE..... ME - MIDDLE EAST AND NORTH AFRICA..... ASA - ASIA
 CAN - CANADA..... AFR - AFRICA SOUTH OF SAHARA..... AUS - AUSTRALASIA
 LAT - LATIN AMERICA AND CARIBBEAN..... SAF - REPUBLIC OF SOUTH AFRICA

MILITARY TURBINE ENGINES INVENTORY

TURBOFAN - MAXIMUM THRUST OF 7 TO 14 TONS (UNITS IN SERVICE AT YEAR-END)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	913	233	8,091	25	107	1,018	30	0	79	60	10,556
1985	2,519	364	10,997	180	208	1,632	77	0	566	93	16,636
1986	2,741	381	11,553	260	221	1,641	77	10	827	133	17,844
1987	2,963	426	13,072	298	239	2,104	149	20	1,013	158	20,442
1988	3,256	488	13,581	348	251	2,244	143	20	1,321	228	21,880
1989	3,411	516	14,362	348	306	2,344	130	20	1,449	265	23,151
1990	3,718	547	14,978	340	311	2,578	122	20	1,511	265	24,390
1991	3,712	567	15,096	340	321	2,549	119	20	1,607	260	24,591
1992	3,653	608	15,209	340	321	3,072	114	20	1,573	258	25,168

MARKET SHARE OF ENGINES OF EU DESIGN ORIGIN (AS % OF TOTAL)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	78.6	0.0	14.0	0.0	0.0	0.0	0.0	-	0.0	0.0	17.5
1985	81.8	0.0	10.8	0.0	0.0	0.0	0.0	-	7.1	0.0	19.8
1986	82.0	0.0	9.6	0.0	2.3	1.5	0.0	0.0	7.5	0.0	19.3
1987	80.7	0.0	8.8	0.0	6.3	3.6	0.0	0.0	6.6	0.0	18.1
1988	80.1	0.0	7.8	0.0	6.0	3.3	0.0	0.0	5.1	0.0	17.5
1989	78.1	0.0	7.2	0.0	4.9	6.1	0.0	0.0	5.0	0.0	17.0
1990	77.2	0.0	6.4	0.0	4.8	8.3	0.0	0.0	6.0	0.0	17.0
1991	75.1	0.0	5.0	0.0	4.7	9.5	0.0	0.0	5.7	0.0	15.8
1992	74.2	0.0	3.2	0.0	4.7	7.9	0.0	0.0	6.1	0.0	14.1

MARKET SHARE OF ENGINES OF INTERNATIONAL (EU/USA) DESIGN ORIGIN (AS % OF TOTAL)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0
1985	0.9	0.0	7.1	0.0	0.0	0.3	0.0	-	0.5	0.0	4.9
1986	1.9	0.0	8.4	0.0	0.0	1.4	0.0	0.0	0.4	0.0	5.9
1987	1.7	0.0	8.9	0.0	0.0	3.1	0.0	0.0	0.3	0.0	6.3
1988	1.6	0.0	9.9	0.0	0.0	2.9	0.0	0.0	0.2	0.0	6.7
1989	1.5	0.0	10.6	0.0	0.0	2.9	0.0	0.0	0.2	0.0	7.1
1990	1.4	0.0	11.4	0.0	0.0	2.7	0.0	0.0	0.2	0.0	7.5
1991	2.6	0.0	11.9	0.0	0.0	2.7	0.0	0.0	0.2	0.0	8.0
1992	2.8	0.0	13.0	0.0	0.0	2.2	0.0	0.0	0.4	0.0	8.6

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MILITARY TURBINE ENGINES INVENTORY

TURBOFAN - MAXIMUM THRUST OF 3 TO 7 TONS (UNITS IN SERVICE AT YEAR-END)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1975	1,083	0	381	0	23	24	20	23	68	5	1,627
1980	1,410	0	1,622	0	78	63	37	15	405	5	3,635
1985	1,076	0	2,328	23	120	119	96	15	595	13	4,385
1986	1,075	0	2,302	23	130	124	95	15	636	13	4,413
1987	1,024	0	2,263	26	134	126	101	15	688	13	4,390
1988	1,001	5	2,398	40	127	124	98	15	740	13	4,561
1989	1,015	5	2,406	40	128	135	100	15	808	13	4,665
1990	1,077	5	2,363	40	118	136	103	15	848	8	4,713
1991	1,081	5	2,328	40	129	136	106	0	863	8	4,696
1992	1,026	8	2,153	40	138	129	112	0	885	8	4,499

MARKET SHARE OF ENGINES OF EU DESIGN ORIGIN (AS % OF TOTAL)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1975	98.8	-	0.8	-	100.0	33.3	100.0	100.0	55.9	100.0	73.1
1980	99.1	-	0.2	-	75.6	61.9	73.0	100.0	83.0	100.0	51.7
1985	92.5	-	0.4	0.0	54.2	73.9	78.1	100.0	84.2	38.5	40.0
1986	91.8	-	0.7	0.0	54.6	74.2	76.8	100.0	84.3	38.5	40.7
1987	90.6	-	1.5	0.0	53.0	77.0	78.2	100.0	84.9	38.5	41.3
1988	90.5	100.0	1.8	0.0	53.5	78.2	77.6	100.0	86.1	38.5	40.6
1989	91.0	100.0	1.7	0.0	53.9	80.0	74.0	100.0	81.9	38.5	40.8
1990	90.2	100.0	1.8	0.0	61.9	81.6	74.8	100.0	80.4	0.0	41.9
1991	90.2	100.0	1.8	0.0	65.1	81.6	75.5	-	80.2	0.0	42.4
1992	90.8	100.0	2.0	0.0	64.5	80.6	76.8	-	78.2	0.0	43.4

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MILITARY TURBINE ENGINES INVENTORY

TURBOFAN - MAXIMUM THRUST BELOW 3 TONS (UNITS IN SERVICE AT YEAR-END)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1975	65	384	0	20	3	29	12	0	3	8	524
1980	671	369	0	18	31	179	60	0	29	8	1,365
1985	1,386	463	313	18	138	449	244	0	162	5	3,178
1986	1,387	286	313	18	164	441	216	0	187	8	3,020
1987	1,383	286	322	15	175	503	233	0	238	8	3,163
1988	1,393	451	325	15	191	578	239	0	288	8	3,488
1989	1,414	453	325	0	215	820	243	0	363	20	3,853
1990	1,418	471	341	0	227	833	242	0	431	20	3,983
1991	1,417	475	328	0	235	815	249	0	474	20	4,013
1992	1,366	467	374	0	232	831	276	8	543	20	4,117

MARKET SHARE OF ENGINES OF EU DESIGN ORIGIN (AS % OF TOTAL)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1975	0.0	95.8	-	0.0	0.0	0.0	0.0	-	0.0	0.0	70.2
1980	83.9	94.9	-	0.0	0.0	21.2	35.0	-	27.6	0.0	71.8
1985	80.9	87.7	0.0	0.0	0.0	49.7	48.0	-	11.7	0.0	59.3
1986	80.2	80.1	0.0	0.0	0.0	52.8	52.8	-	10.2	0.0	56.6
1987	79.9	80.1	0.0	0.0	0.0	47.7	48.1	-	8.0	0.0	53.9
1988	79.0	87.4	0.9	0.0	0.0	46.9	48.1	-	6.6	0.0	54.6
1989	77.2	86.3	0.9	-	0.0	32.4	44.9	-	5.0	0.0	48.7
1990	76.7	86.8	1.8	-	0.0	31.1	45.0	-	4.2	0.0	47.4
1991	76.4	86.9	1.8	-	0.0	31.8	45.0	-	3.8	0.0	47.1
1992	74.7	87.8	5.3	-	0.0	31.9	42.8	0.0	6.6	0.0	45.4

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MILITARY TURBINE ENGINES INVENTORY

TURBOJET - MAXIMUM THRUST OF 7 TO 14 TONS (UNITS IN SERVICE AT YEAR-END)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1975	2,943	978	9,536	180	106	2,300	100	20	1,731	0	17,894
1980	2,983	1,010	6,616	110	144	2,804	193	70	2,221	0	16,151
1985	1,877	1,022	5,237	0	259	3,460	293	69	2,210	0	14,427
1986	1,807	1,070	4,775	0	259	3,346	268	68	2,102	0	13,695
1987	1,655	1,141	3,992	0	259	3,357	265	65	2,120	0	12,854
1988	1,603	1,025	3,349	0	239	3,441	284	65	2,112	0	12,118
1989	1,518	977	2,595	0	257	3,380	287	79	2,219	0	11,312
1990	1,501	972	1,969	0	269	3,311	284	84	2,270	0	10,660
1991	1,549	1,015	1,230	0	269	3,108	320	90	2,326	0	9,907
1992	1,450	968	639	0	287	2,898	281	69	2,242	0	8,834

MARKET SHARE OF ENGINES OF EU DESIGN ORIGIN (AS % OF TOTAL)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1975	29.2	38.5	0.0	0.0	0.0	6.4	0.0	100.0	0.0	-	7.8
1980	29.0	34.5	0.0	0.0	21.5	7.6	0.0	100.0	0.0	-	9.5
1985	29.8	23.8	0.0	-	15.1	12.4	0.0	100.0	0.0	-	9.3
1986	32.0	23.7	0.0	-	15.1	10.8	0.0	100.0	0.0	-	9.5
1987	30.4	17.2	0.0	-	15.1	10.8	0.0	100.0	0.0	-	9.1
1988	27.9	19.6	0.0	-	15.9	10.5	0.0	100.0	0.0	-	9.2
1989	28.9	18.6	0.0	-	14.4	11.0	0.0	100.0	0.0	-	9.8
1990	28.7	18.6	0.0	-	13.8	10.7	0.0	100.0	0.0	-	10.2
1991	27.4	17.7	0.0	-	13.8	10.2	0.0	100.0	0.0	-	10.6
1992	27.6	18.6	0.0	-	19.9	8.2	0.0	100.0	0.0	-	10.7

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MILITARY TURBINE ENGINES INVENTORY

TURBOJET - MAXIMUM THRUST OF 3 TO 7 TONS (UNITS IN SERVICE AT YEAR-END)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1975	1,781	392	10,286	264	642	1,597	288	88	2,352	202	17,892
1980	1,335	295	8,756	134	648	1,270	356	73	2,182	184	15,233
1985	992	229	6,040	8	614	1,398	368	70	2,050	122	11,891
1986	871	228	5,664	8	616	1,283	336	70	2,342	113	11,531
1987	770	228	5,214	0	601	1,249	321	70	2,405	87	10,945
1988	657	228	4,936	0	595	1,179	311	64	2,086	36	10,092
1989	616	228	4,167	0	361	1,038	304	50	1,797	26	8,587
1990	602	226	3,845	0	348	1,003	304	30	1,751	26	8,135
1991	535	224	3,247	0	341	905	295	0	1,746	26	7,319
1992	429	224	2,637	0	327	855	280	0	1,656	25	6,433

MARKET SHARE OF ENGINES OF EU DESIGN ORIGIN (AS % OF TOTAL)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1975	94.4	94.6	0.0	0.0	57.0	33.3	30.6	100.0	28.2	80.7	22.1
1980	96.4	100.0	0.0	0.0	53.1	27.3	24.7	100.0	22.7	80.4	20.2
1985	95.5	100.0	0.0	0.0	62.2	24.1	18.5	100.0	24.9	77.0	22.2
1986	94.8	100.0	0.0	0.0	62.3	25.8	17.6	100.0	15.6	75.2	20.4
1987	98.6	100.0	0.0	-	61.6	23.8	19.9	100.0	15.1	67.8	20.2
1988	100.0	100.0	0.0	-	61.5	23.7	19.6	100.0	15.2	22.2	19.6
1989	100.0	100.0	0.0	-	77.8	25.6	19.7	100.0	17.5	0.0	21.1
1990	100.0	100.0	0.0	-	77.0	26.4	19.7	100.0	18.0	0.0	21.7
1991	100.0	100.0	0.0	-	76.5	29.2	20.3	-	18.4	0.0	22.7
1992	100.0	100.0	0.0	-	75.8	30.9	19.6	-	16.1	0.0	23.1

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MILITARY TURBINE ENGINES INVENTORY

TURBOJET - MAXIMUM THRUST BELOW 3 TONS (UNITS IN SERVICE AT YEAR-END)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1975	4,591	1,883	7,526	588	1,469	2,131	352	267	4,652	151	23,610
1980	3,734	1,744	6,058	419	1,406	2,084	347	277	3,937	124	20,130
1985	3,005	1,868	5,065	416	1,322	2,021	349	279	3,987	122	18,434
1986	2,693	1,696	4,922	414	1,326	1,964	308	278	3,896	119	17,616
1987	2,688	1,661	4,711	414	1,309	1,906	271	277	3,801	118	17,156
1988	2,537	1,746	4,578	409	1,368	1,817	251	281	3,701	114	16,802
1989	2,370	1,783	4,446	409	1,347	1,718	248	281	3,550	113	16,265
1990	2,389	1,750	4,414	409	1,326	1,716	253	278	3,420	107	16,062
1991	2,219	1,804	4,313	409	1,322	1,567	243	274	3,189	112	15,452
1992	1,971	1,752	4,041	407	1,345	1,559	244	273	3,098	101	14,791

MARKET SHARE OF ENGINES OF EU DESIGN ORIGIN (AS % OF TOTAL)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1975	61.1	35.1	0.0	21.9	27.8	26.8	45.2	93.6	18.4	83.4	25.2
1980	60.8	35.7	0.0	23.4	30.4	26.8	43.8	100.0	16.9	100.0	25.8
1985	57.4	44.5	0.0	21.6	30.4	26.5	42.7	100.0	15.4	100.0	25.8
1986	53.4	41.6	0.0	21.7	30.4	26.4	43.5	100.0	15.7	100.0	24.4
1987	53.9	39.9	0.0	21.7	30.3	27.4	49.1	100.0	14.9	100.0	24.6
1988	53.9	43.6	0.0	22.0	28.1	27.8	51.4	100.0	13.5	100.0	24.6
1989	52.9	42.4	0.0	22.0	26.3	29.5	51.2	100.0	12.1	100.0	24.0
1990	51.1	38.1	0.0	22.0	26.6	29.5	50.2	100.0	11.7	100.0	23.3
1991	52.8	36.8	0.0	22.0	26.6	26.7	50.2	100.0	11.9	100.0	23.2
1992	50.8	35.3	0.0	22.1	26.0	26.8	51.2	100.0	11.9	100.0	22.6

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MILITARY TURBINE ENGINES INVENTORY

TURBOPROP (UNITS IN SERVICE AT YEAR-END)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1975	1,568	268	7,599	213	898	1,114	216	78	1,170	199	13,323
1980	1,807	334	7,725	246	1,511	1,355	445	73	1,712	356	15,564
1985	2,091	453	8,662	278	2,048	1,772	780	65	2,233	383	18,765
1986	2,076	453	8,815	280	2,192	1,774	821	62	2,506	353	19,332
1987	2,121	400	8,690	280	2,340	1,853	827	60	2,608	369	19,548
1988	2,184	413	8,517	280	2,468	1,997	826	60	2,852	409	20,006
1989	2,316	417	8,425	281	2,414	1,982	824	62	2,997	432	20,150
1990	2,439	409	8,480	291	2,461	2,023	853	62	3,112	459	20,589
1991	2,478	429	8,531	309	2,458	2,065	854	57	3,175	482	20,838
1992	2,536	463	8,283	291	2,570	2,146	843	57	3,324	447	20,960

MARKET SHARE OF ENGINES OF EU DESIGN ORIGIN (AS % OF TOTAL)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1975	63.1	22.8	0.3	8.5	21.2	5.3	22.7	35.9	19.9	14.1	12.6
1980	46.8	19.8	0.2	7.3	17.2	5.8	16.0	38.4	16.7	17.1	11.1
1985	41.6	15.9	0.4	6.5	17.4	6.0	8.3	43.1	14.6	17.2	10.4
1986	40.6	14.8	0.4	6.4	15.5	6.0	8.3	40.3	13.2	10.2	9.7
1987	40.4	16.7	0.4	6.4	14.4	5.7	8.3	41.7	12.5	14.4	9.7
1988	39.5	16.2	0.4	6.4	13.7	5.3	7.7	41.7	12.1	13.7	9.6
1989	37.4	16.1	0.4	6.4	11.8	5.3	7.8	40.3	11.5	13.0	9.3
1990	35.8	16.4	0.4	6.2	11.4	5.2	7.5	40.3	11.1	13.3	9.1
1991	35.6	15.6	0.5	5.8	11.4	5.1	7.1	35.1	10.8	13.3	9.0
1992	34.0	14.5	0.5	6.2	10.9	4.7	7.2	35.1	10.4	12.5	8.8

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MILITARY TURBINE ENGINES INVENTORY

TURBOSHAF (UNITS IN SERVICE AT YEAR-END)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1975	4,524	713	15,256	342	710	1,929	380	259	1,950	215	26,278
1980	5,361	894	15,679	330	977	3,200	672	285	2,938	211	30,547
1985	6,857	1,221	16,013	328	1,655	3,998	1,033	278	3,983	218	35,584
1986	6,794	1,242	16,622	328	1,855	4,097	1,090	276	4,262	217	36,783
1987	6,619	1,351	16,551	323	1,893	4,430	1,264	269	4,400	210	37,310
1988	6,702	1,400	16,624	322	1,879	4,420	1,302	262	4,661	205	37,777
1989	6,709	1,395	16,663	317	2,107	4,423	1,266	262	4,704	237	38,083
1990	6,994	1,419	17,220	317	2,278	4,441	1,247	212	4,953	289	39,370
1991	7,092	1,452	16,473	309	2,348	4,404	1,238	211	5,084	238	38,849
1992	7,050	1,502	16,102	298	2,350	4,419	1,214	177	5,201	233	38,546

MARKET SHARE OF ENGINES OF EU DESIGN ORIGIN (AS % OF TOTAL)

	EU	EUR	USA	CAN	LAT	ME	AFR	SAF	ASA	AUS	TOTAL
1975	65.8	45.6	0.0	0.0	22.0	22.5	70.3	100.0	17.5	24.2	18.3
1980	64.0	41.6	0.0	0.0	27.8	21.0	44.6	100.0	20.1	20.9	19.5
1985	51.9	41.3	0.0	0.0	22.2	24.7	45.7	100.0	17.7	36.7	19.5
1986	52.1	40.3	0.0	0.0	23.2	25.1	44.8	100.0	17.2	35.9	19.2
1987	51.4	37.2	0.0	0.0	23.1	24.9	37.6	100.0	17.5	36.7	18.9
1988	51.1	37.1	0.0	0.0	23.5	23.3	34.5	100.0	17.3	31.2	18.5
1989	50.6	36.6	0.0	0.0	23.2	22.5	34.0	100.0	18.1	27.8	18.4
1990	49.7	36.5	0.0	0.0	24.9	22.4	35.0	100.0	18.0	22.8	18.2
1991	49.9	37.6	0.0	0.0	24.9	21.7	35.1	100.0	18.2	26.9	18.7
1992	50.3	37.8	0.0	0.0	24.1	21.0	35.5	100.0	17.9	26.6	18.7

EUR - NON-EU EUROPE..... ME - MIDDLE EAST AND NORTH AFRICA..... ASA - ASIA
 CAN - CANADA..... AFR - AFRICA SOUTH OF SAHARA..... AUS - AUSTRALASIA
 LAT - LATIN AMERICA AND CARIBBEAN..... SAF - REPUBLIC OF SOUTH AFRICA

WORLD MILITARY TURBINE ENGINES INVENTORY - MARKET SHARE BY MANUFACTURER

TURBOFAN - MAXIMUM THRUST ABOVE 14 TONS

	CFM INT'L	ROLLS-ROYCE	SNECMA	TURBO-UNION	GENERAL ELECTRIC	PRATT AND WHITNEY	OTHER	TOTAL (UNITS)
1975	0%	0%	0%	0%	88%	12%	0%	423
1980	0%	0%	0%	0%	89%	11%	0%	422
1985	0%	3%	0%	0%	92%	4%	0%	554
1986	0%	5%	0%	0%	92%	4%	0%	642
1987	0%	5%	0%	0%	92%	3%	0%	733
1988	0%	4%	0%	0%	93%	3%	0%	843
1989	0%	5%	0%	0%	93%	3%	0%	869
1990	0%	5%	0%	0%	93%	3%	0%	882
1991	0%	5%	0%	0%	92%	3%	0%	911
1992	0%	5%	0%	0%	90%	5%	0%	934

TURBOFAN - MAXIMUM THRUST OF 7 TO 14 TONS

	CFM INT'L	ROLLS-ROYCE	SNECMA	TURBO-UNION	GENERAL ELECTRIC	PRATT AND WHITNEY	OTHER	TOTAL (UNITS)
1975	0%	24%	0%	0%	0%	73%	3%	7,216
1980	0%	17%	0%	0%	0%	75%	7%	10,559
1985	5%	11%	0%	8%	4%	63%	8%	16,636
1986	6%	10%	1%	8%	4%	62%	8%	17,844
1987	6%	9%	1%	8%	10%	56%	9%	20,442
1988	7%	8%	1%	8%	12%	54%	10%	21,880
1989	7%	8%	1%	8%	14%	51%	11%	23,151
1990	8%	7%	2%	9%	15%	50%	11%	24,390
1991	8%	5%	2%	9%	17%	49%	10%	24,591
1992	9%	4%	2%	9%	18%	49%	11%	25,168

TURBOFAN - MAXIMUM THRUST OF 3 TO 7 TONS

	CFM INT'L	ROLLS-ROYCE	SNECMA	TURBO-UNION	GENERAL ELECTRIC	PRATT AND WHITNEY	OTHER	TOTAL (UNITS)
1975	0%	73%	0%	0%	16%	11%	0%	1,627
1980	0%	52%	0%	0%	41%	7%	0%	3,635
1985	0%	40%	0%	0%	49%	10%	1%	4,385
1986	0%	41%	0%	0%	48%	10%	1%	4,413
1987	0%	41%	0%	0%	47%	10%	1%	4,390
1988	0%	41%	0%	0%	48%	10%	1%	4,561
1989	0%	41%	0%	0%	48%	10%	1%	4,665
1990	0%	42%	0%	0%	47%	9%	1%	4,713
1991	0%	42%	0%	0%	47%	9%	1%	4,696
1992	0%	43%	0%	0%	45%	10%	1%	4,499

WORLD MILITARY TURBINE ENGINES INVENTORY - MARKET SHARE BY MANUFACTURER

TURBOFAN - MAXIMUM THRUST BELOW 3 TONS

	CFM INT'L	ROLLS-ROYCE	SNECMA	TURBO-UNION	GENERAL ELECTRIC	PRATT AND WHITNEY	OTHER	TOTAL (UNITS)
1975	0%	0%	0%	0%	22%	0%	78%	524
1980	0%	15%	31%	0%	11%	0%	42%	1,359
1985	0%	11%	38%	0%	6%	0%	46%	3,178
1986	0%	11%	40%	0%	6%	0%	43%	3,020
1987	0%	11%	38%	0%	6%	0%	46%	3,163
1988	0%	11%	34%	0%	5%	0%	50%	3,488
1989	0%	9%	31%	0%	4%	0%	55%	3,853
1990	0%	10%	30%	0%	4%	0%	56%	3,983
1991	0%	10%	29%	0%	4%	0%	57%	4,013
1992	0%	10%	27%	0%	5%	0%	58%	4,117

TURBOJET - MAXIMUM THRUST OF 7 TO 14 TONS

	CFM INT'L	ROLLS-ROYCE	SNECMA	TURBO-UNION	GENERAL ELECTRIC	PRATT AND WHITNEY	OTHER	TOTAL (UNITS)
1975	0%	7%	1%	0%	59%	18%	15%	17,894
1980	0%	7%	3%	0%	60%	9%	21%	16,151
1985	0%	3%	6%	0%	59%	4%	28%	14,427
1986	0%	3%	6%	0%	58%	3%	29%	13,695
1987	0%	2%	7%	0%	56%	3%	32%	12,854
1988	0%	2%	7%	0%	55%	1%	35%	12,118
1989	0%	2%	8%	0%	52%	1%	37%	11,312
1990	0%	2%	8%	0%	49%	1%	40%	10,660
1991	0%	2%	8%	0%	46%	1%	42%	9,907
1992	0%	3%	8%	0%	44%	1%	44%	8,834

TURBOJET - MAXIMUM THRUST OF 3 TO 7 TONS

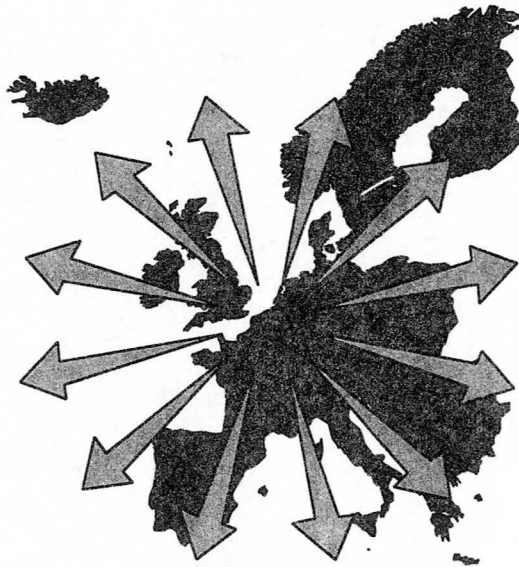
	CFM INT'L	ROLLS-ROYCE	SNECMA	TURBO-UNION	GENERAL ELECTRIC	PRATT AND WHITNEY	OTHER	TOTAL (UNITS)
1975	0%	11%	10%	0%	0%	59%	20%	17,892
1980	0%	10%	10%	0%	0%	61%	19%	15,233
1985	0%	10%	12%	0%	0%	55%	22%	11,897
1986	0%	9%	12%	0%	0%	54%	25%	11,531
1987	0%	9%	12%	0%	0%	53%	27%	10,945
1988	0%	9%	11%	0%	0%	54%	27%	10,092
1989	0%	9%	12%	0%	0%	53%	26%	8,592
1990	0%	9%	13%	0%	0%	51%	27%	8,135
1991	0%	9%	13%	0%	0%	49%	29%	7,319
1992	0%	9%	14%	0%	0%	46%	31%	6,433

WORLD MILITARY TURBINE ENGINES INVENTORY - MARKET SHARE BY MANUFACTURER

TURBOJET - MAXIMUM THRUST BELOW 3 TONS

	CFM INT'L	ROLLS-ROYCE	SNECMA	TURBO-UNION	GENERAL ELECTRIC	PRATT AND WHITNEY	OTHER	TOTAL (UNITS)
1975	0%	14%	0%	0%	43%	3%	40%	23,610
1980	0%	15%	0%	0%	45%	3%	37%	20,130
1985	0%	16%	0%	0%	48%	2%	35%	18,434
1986	0%	17%	0%	0%	49%	2%	33%	17,616
1987	0%	17%	0%	0%	50%	1%	32%	17,156
1988	0%	17%	0%	0%	50%	1%	32%	16,802
1989	0%	17%	0%	0%	51%	1%	31%	16,265
1990	0%	16%	0%	0%	52%	1%	30%	16,062
1991	0%	17%	0%	0%	53%	1%	29%	15,452
1992	0%	16%	0%	0%	54%	1%	29%	14,791

EU CIVIL AIRCRAFT PRODUCTS FOREIGN TRADE



EU CIVIL AIRCRAFT PRODUCTS FOREIGN TRADE

The figures on EU foreign trade in civil aircraft products are obtained using the *COMBINED NOMENCLATURE (CN)* tables supplied by the **Statistical Office of The European Union (Eurostat)**.

The statistical data only concern the *civil aircraft, goods for use in civil aircraft* and for incorporation therein during their manufacture, repair, maintenance, rebuilding, modification or conversion, and *ground flying-trainers and their parts, for civil use*. "Civil aircraft" means aircraft other than aircraft used in military or similar services in the Member States, which carry a military or non-civil registration.

Data concerning the United Kingdom are not complete and do not allow the subdivision as indicated below.

So as to simplify the presentation of the data concerning trade on these products, four groups of products have been created: *airframes, engines, equipment and other material*.

● airframes

- ✘ Balloons and dirigibles; gliders, hand gliders and other non-powered aircraft
- ✘ Helicopters
- ✘ Aeroplanes and other aircraft
- ✘ Propellers and rotors and parts thereof
- ✘ Under-carriages and parts thereof
- ✘ Ground flying trainers and parts thereof

● engines

- ✘ Spark-ignition internal combustion piston engines
- ✘ Compression-ignition internal combustion piston engines (diesel or semi-diesel engines)
- ✘ Parts suitable for use solely or principally with spark- or compression-ignition aircraft engines
- ✘ Turbo-jets, turbo-propellers and other gas turbines, and parts
- ✘ Other engines and motors (reaction engines other than turbo-jets, hydraulic and pneumatic power engines and motors, etc.) and parts

● equipment

- ✘ Automatic data-processing machines and units thereof
- ✘ Hydropneumatic batteries; mechanical actuators for thrust reversers; toilet units specially designed; air humidifiers and dehumidifiers; servo-mechanisms, non-electric; non-electric starter motors; pneumatic starters for turbo-jets, turbo-propellers and other gas turbines; windscreens wipers, non-electric; propeller regulators, non-electric
- ✘ Transmission shafts (including cam shafts and crank shafts) and cranks

● equipment (continued)

- ⌘ Bearing housings, not incorporating ball or roller bearings; plain shaft bearings
- ⌘ Gears and gearing, other than toothed wheels, chain sprockets and other transmission elements presented separately; ball screws; gear boxes and other speed changers, including torque converters
- ⌘ Flywheels and pulleys, including pulley blocks
- ⌘ Clutches and shaft couplings (including universal joints)
- ⌘ Microphones and stands therefor; loudspeakers; telephones, earphones and combined microphone/speaker sets; audio-frequency electric amplifiers; electric sound amplifier sets
- ⌘ Magnetic tape recorders and other sound recording apparatus
- ⌘ Video magnetic tape recording or reproducing apparatus
- ⌘ Transmission apparatus for radio-telephony or radio-telegaphy
- ⌘ Radar apparatus, radio navigational aid apparatus and radio remote control apparatus
- ⌘ Reception apparatus for radio-telephony or radio-telegaphy
- ⌘ Aerials and aerial reflectors; parts suitable for use therewith
- ⌘ Electric sound or visual signalling apparatus (fire alarms and similar apparatus, indicator panels incorporating liquid crystal devices (LCD) or light emitting diodes (LED), etc.)

- ⌘ Flight recorders
- ⌘ Ignition wiring sets and other wiring sets
- ⌘ Optical elements
- ⌘ Direction finding compasses
- ⌘ Stall warning calculators
- ⌘ Breathing appliances and gas masks (excluding parts thereof)
- ⌘ Hydrometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers
- ⌘ Instruments and apparatus for measuring or checking the flow, level, pressure or other variables of liquids or gases
- ⌘ Revolution counters, speed indicators and tachometers
- ⌘ Oscilloscopes, spectrum analysers and other instruments and apparatus for measuring or checking electrical quantities, measuring or detecting ionizing radiations
- ⌘ Other measuring or checking instruments, appliances and machines
- ⌘ Automatic regulating or controlling instruments and apparatus
- ⌘ Instrument panel clocks
- ⌘ Clock movements, complete and assembled

● Other material

- ⌘ Tubes, pipes and hoses, and fittings therefor (for example, joints, elbows, flanges), of plastics
- ⌘ Other articles of plastics for technical uses

● **Other material** (continued)

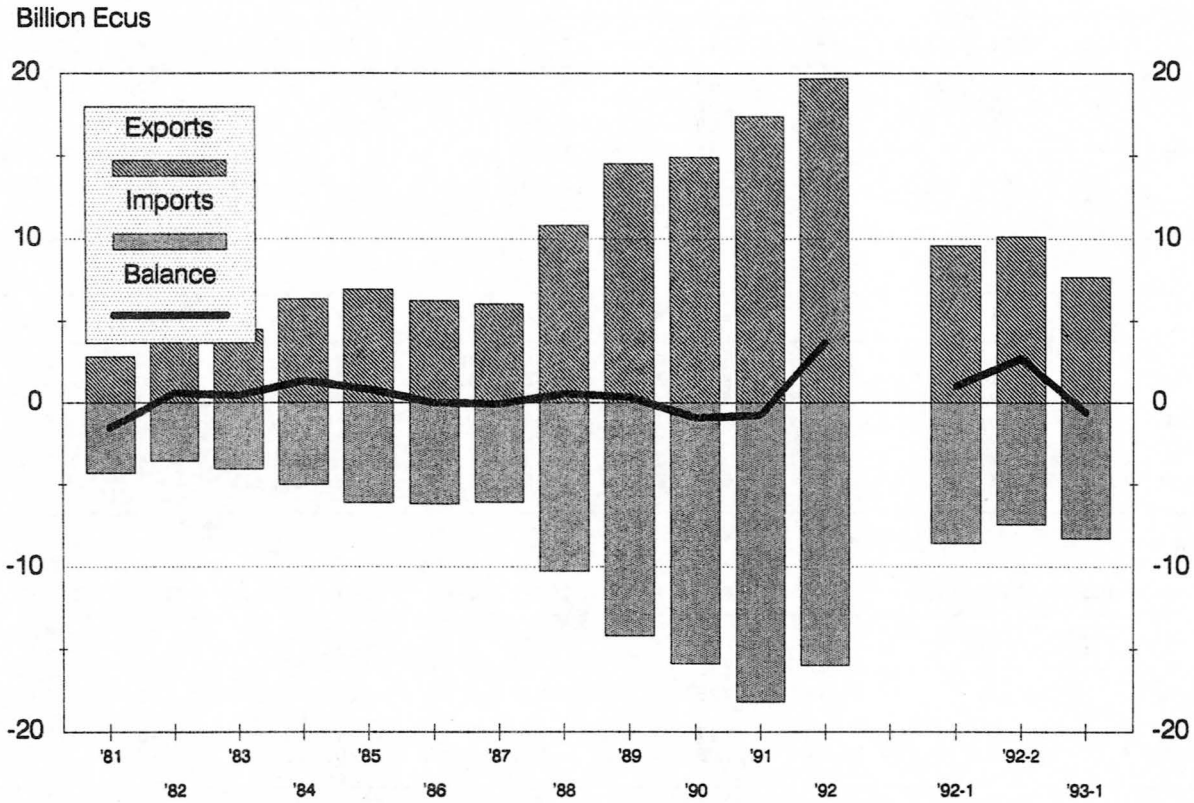
- ⊠ Profile shapes, cut to size, of vulcanized rubber other than hard rubber
- ⊠ Tubes, pipes and hoses, of vulcanized rubber other than hard rubber, with fittings, suitable for conducting gases or liquids
- ⊠ New pneumatic tyres, of rubber
- ⊠ Retreaded or used pneumatic tyres, of rubber
- ⊠ Other articles of vulcanized rubber other than hard rubber
- ⊠ Piping and tubing of hard rubber, with fittings attached, suitable for conducting gases or liquids
- ⊠ Gaskets, washers and other seals of agglomerated cork
- ⊠ Gaskets, washers and other seals of paper pulp, paper or paperboard
- ⊠ Articles of asbestos or of asbestos and magnesium carbonate
- ⊠ Friction material and articles thereof, not mounted, for brakes, for clutches or the like, with a basis of asbestos or other mineral substances
- ⊠ Windshields of laminated safety glass, not framed
- ⊠ Tubes, pipes and hollow profiles, of iron or steel, with fittings attached, suitable for conducting gases or liquids
- ⊠ Stranded wire, ropes, cables, plaited bands, slings and the like, of iron or steel, not electrically insulated, with fittings attached
- ⊠ Air heaters and hot air distributors (excluding parts thereof)
- ⊠ Sanitary ware (excluding parts thereof), of iron and steel
- ⊠ Other articles of iron or steel wire
- ⊠ Stranded wire, cables, plaited bands and the like, of copper, not electrically insulated, with fittings attached
- ⊠ Aluminium tubes and pipes, with fittings attached, suitable for conducting gases or liquids
- ⊠ Titanium tubes and pipes, with fittings attached, suitable for conducting gases or liquids
- ⊠ Base metal mountings, fittings and similar articles (hinges, castors, automatic door closers, etc.)
- ⊠ Flexible tubing of base metal, with fittings attached
- ⊠ Pumps for liquids; liquid elevators, and parts
- ⊠ Air vacuum pumps, air or other gas compressors and fans, and parts
- ⊠ Air conditioning machines and parts
- ⊠ Refrigerators, freezers and other refrigerating or freezing equipment; heat pumps other than air conditioning machines
- ⊠ Heat exchange units and parts
- ⊠ Other machinery for making hot drinks or for cooking or heating food
- ⊠ Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus, for liquids or gases
- ⊠ Fire extinguishers
- ⊠ Pulley tackle and hoists other than skip hoists; winches and capstans; jacks
- ⊠ Cranes

● **Other material** (continued)

- ❑ Other lifting, handling, loading or unloading machinery (for example, lifts, skip hoists, elevators and conveyors, etc.)
- ❑ Gaskets and similar joints of metal sheeting combined with other material or of two or more layers of metal
- ❑ Electric motors and generators (excluding generating sets)
- ❑ Electric generating sets and rotary converters
- ❑ Electric transformers, static converters and inductors
- ❑ Electric accumulators, including separators therefor
- ❑ Electrical ignition or starting equipment of a kind used for spark-ignition or compression-ignition internal combustion engines; generators and cut-outs of a kind used together with such engines
- ❑ Electric heating resistors, assembled only with a simple insulated former and electrical connections, used for anti-icing or de-icing
- ❑ Sealed beam lamp units
- ❑ Furniture
- ❑ Lamps and lighting fittings; illuminated signs and name-plates

Note: Total EU civil aircraft products foreign trade has been compared with total US civil trade.

EU Civil Aircraft Products Foreign Trade



■ SOURCE: EUROSTAT

EU CIVIL AIRCRAFT PRODUCTS FOREIGN TRADE

TOTAL, COMPARED WITH US TRADE (MIO ECUS)

1) IMPORTS

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1/6-92	7/12-92	1/6-93
AIRFRAMES	1,491	1,721	2,660	2,817	2,633	5,754	8,763	10,064	11,947	9,965	5,582	4,383	5,275
ENGINES	1,879	2,504	2,644	2,555	2,648	2,970	3,592	3,869	4,125	3,815	1,873	1,942	1,911
EQUIPMENT	499	556	573	579	560	589	694	755	780	820	421	399	338
OTHER MATERIAL	153	192	234	225	194	933	1,147	1,175	1,312	1,377	703	674	723
TOTAL EU	4,022	4,974	6,111	6,176	6,035	10,246	14,196	15,863	18,164	15,977	8,579	7,398	8,246
US CIVIL TRADE	3,288	4,800	6,531	6,501	5,552	6,430	6,535	6,480	7,479	7,546	-	-	-

2) EXPORTS

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1/6-92	7/12-92	1/6-93
AIRFRAMES	2,791	3,962	3,704	2,956	2,651	6,228	8,959	8,072	10,386	12,096	5,844	6,252	4,615
ENGINES	1,285	1,875	2,649	2,655	2,806	2,901	3,684	4,788	4,910	5,286	2,609	2,677	1,895
EQUIPMENT	247	296	356	387	361	477	537	622	565	591	285	306	266
OTHER MATERIAL	145	164	205	189	169	1,183	1,360	1,462	1,554	1,693	822	871	858
TOTAL EU	4,468	6,297	6,914	6,187	5,988	10,790	14,540	14,944	17,415	19,667	9,560	10,107	7,634
US CIVIL TRADE	11,902	12,242	16,960	15,089	13,657	17,164	23,252	24,751	28,686	28,429	-	-	-

3) TRADE BALANCE

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1/6-92	7/12-92	1/6-93
AIRFRAMES	1,300	2,240	1,044	139	18	474	196	-1,992	-1,561	2,131	262	1,870	- 660
ENGINES	- 594	- 629	5	100	159	-68	92	919	785	1,471	736	735	-15
EQUIPMENT	- 252	- 260	- 217	- 193	- 199	- 111	- 157	- 133	- 215	- 228	- 136	-93	-72
OTHER MATERIAL	-8	-28	-30	-36	-25	250	213	287	243	317	119	197	135
TOTAL EU	445	1,323	803	11	-47	544	344	- 919	- 749	3,690	981	2,709	- 612
US CIVIL TRADE	8,614	7,442	10,429	8,589	8,106	10,733	16,717	18,272	21,207	20,883	-	-	-

■ SOURCE : EUROSTAT / A.I.A.A.

EU CIVIL AIRCRAFT PRODUCTS FOREIGN TRADE

WITH USA (MIO ECUS)

1) IMPORTS

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1/6-92	7/12-92	1/6-93
AIRFRAMES	1,282	1,484	2,338	2,604	2,236	3,826	6,846	8,134	9,415	6,625	4,002	2,623	2,610
ENGINES	1,702	2,124	2,226	2,196	2,252	2,574	3,081	3,363	3,599	3,242	1,582	1,661	1,560
EQUIPMENT	447	492	512	518	505	489	595	637	657	671	347	324	258
OTHER MATERIAL	132	163	208	204	166	370	459	465	513	525	261	264	274
TOTAL	3,563	4,262	5,285	5,522	5,159	7,259	10,981	12,599	14,184	11,063	6,191	4,871	4,702

2) EXPORTS

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1/6-92	7/12-92	1/6-93
AIRFRAMES	609	879	1,507	806	1,035	2,008	2,635	2,340	2,804	3,049	1,494	1,555	804
ENGINES	803	1,201	1,852	1,844	1,823	1,965	2,556	3,481	3,671	3,978	2,018	1,959	1,225
EQUIPMENT	76	95	126	140	137	147	164	209	202	181	89	92	80
OTHER MATERIAL	29	39	60	62	52	263	315	310	327	337	165	172	169
TOTAL	1,517	2,214	3,544	2,852	3,047	4,382	5,669	6,340	7,004	7,545	3,767	3,778	2,278

3) TRADE BALANCE

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1/6-92	7/12-92	1/6-93
AIRFRAMES	- 673	- 605	- 832	-1,798	-1,202	-1,818	-4,211	-5,794	-6,611	-3,576	-2,508	-1,068	-1,806
ENGINES	- 899	- 923	- 374	- 352	- 429	- 609	- 524	118	71	736	437	299	- 335
EQUIPMENT	- 372	- 397	- 387	- 378	- 367	- 343	- 431	- 428	- 454	- 489	- 257	- 232	- 178
OTHER MATERIAL	- 103	- 124	- 148	- 143	- 114	- 107	- 145	- 155	- 186	- 188	-96	-92	- 105
TOTAL	-2,047	-2,048	-1,741	-2,671	-2,112	-2,877	-5,312	-6,259	-7,180	-3,518	-2,425	-1,093	-2,424

■ SOURCE : EUROSTAT

EU CIVIL AIRCRAFT PRODUCTS FOREIGN TRADE

WITH JAPAN (MIO ECUS)

1) IMPORTS

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1/6-92	7/12-92	1/6-93
AIRFRAMES	29	9	2	3	4	57	34	13	19	31	17	14	12
ENGINES	0	0	3	2	3	4	10	2	1	2	1	1	12
EQUIPMENT	1	1	1	3	3	3	5	6	10	13	7	7	11
OTHER MATERIAL	4	8	5	4	4	83	97	90	103	107	53	54	52
TOTAL	35	18	10	12	14	147	146	111	133	153	78	76	87

2) EXPORTS

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1/6-92	7/12-92	1/6-93
AIRFRAMES	181	18	135	119	46	166	223	365	699	335	153	182	114
ENGINES	4	6	12	18	49	42	41	46	24	38	23	15	12
EQUIPMENT	2	2	3	4	4	6	7	22	18	17	7	10	7
OTHER MATERIAL	1	1	7	4	3	30	35	41	42	44	20	24	22
TOTAL	188	27	158	145	102	245	306	474	784	434	203	231	155

3) TRADE BALANCE

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1/6-92	7/12-92	1/6-93
AIRFRAMES	152	8	134	116	42	109	188	352	680	305	136	169	102
ENGINES	3	5	9	17	46	38	32	44	23	36	22	14	-0
EQUIPMENT	2	2	2	1	1	3	3	16	8	4	1	3	-4
OTHER MATERIAL	-4	-7	3	-1	-0	-52	-62	-49	-61	-64	-34	-30	-30
TOTAL	153	8	147	133	88	97	161	363	651	281	125	156	68

■ SOURCE : EUROSTAT

TURNOVER



CHAPTER 6

TURNOVER

The **annual survey**, conducted by DG III together with the industrial associations of 7 EU Member States - A.I.A. (It), A.T.E.C.M.A. (Es), B.D.L.I. (De), G.E.B.E.C.O.M.A. (Be), G.I.F.A.S. (Fr), N.A.I. (Nl) and S.B.A.C. (UK) -, enables the *turnover* of the European aerospace industry to be broken down by type of *customer* and *sector*. Participants to this survey are the aerospace companies whose turnover concerns (partly or entirely) one or more of the 3 groups of aerospace products listed on the next page.

Revisions or retrospective corrections of historical series can occur. Data for Spain relating to the years 1984-86 have been estimated by linear regression to the turnover of the major Spanish aerospace company, Casa.

Turnover corresponding to **international co-operation programmes** (e.g. *Airbus*, *ATR*) is entered under the heading "*Final Users*". Only the part of these programmes that concerns the **national** industry (i.e. after deduction of the share of the turnover which concerns other countries) is included in the total turnover of a Member State. This applies both to the country that markets the product and to the country that supplies part of the product to the country which markets it.

However, standardization problems of the accounting methods remain and may affect turnover consolidated at the EU level.

Turnover corresponding to sales to **international public organizations** (e.g. *ESA*) is entered under the heading "*National State*". Here too, only the part of these programmes that concerns the **national** industry is included in the total turnover of a Member State.

A distinction is made between the following:

- **Overall non-consolidated turnover**

Overall non-consolidated turnover includes transactions between national aerospace companies. Therefore, it does not show the output of the aerospace sector as such, since it includes intermediate exchanges at national level.

- **Turnover consolidated at national level**

Turnover consolidated at national level does not include transactions between national aerospace companies, and so represents the output of the aerospace sector as such for the individual Member States.

The difference between *overall non-consolidated turnover* and *turnover consolidated at national level* therefore represents the sale of aerospace goods and services between national companies in the various sub-sectors (aircraft, space, propulsion devices and equipment) and between national companies in the same subsectors (e.g. contracting between airframe manufacturers for certain sub-assemblies).

● **Turnover consolidated at EU level**

Turnover consolidated at EU level represents the output of the EU as a whole, since it does not include intra-EU transactions between aerospace companies.

The difference between *turnover consolidated at national level* and *turnover consolidated at EU level* therefore represents the sale of aerospace goods and services between companies located in different EU Member States.

P.S.: in the case of the USA, JAPAN and CANADA turnover is *consolidated*, thus doesn't compare with the EU *overall* level.

The turnover is broken down by *group of products* and by *category of customer* (civil and military).

The *groups of products* considered are as follows:

a. **Complete aerospace systems:**

- ✕ *Aircraft* (airplane, helicopters and gliders), *Missiles*, their parts and spares.
- ✕ *Space* (space vehicles, satellites, launchers, ground installations, etc.).

b. **Propulsion devices**

(Piston engines, turboprops, turbojets, etc.), their parts and spares, equipment and accessories, for installation in the aerospace systems mentioned under (a).

c. **Equipment**

Equipment for the aerospace systems mentioned under (a) (finished products, parts and spares, sub-as-

semblies) including test and ground-training equipment.

The breakdown of turnover between the different *categories of customer* is carried out as follows:

- *National State*: sales or services (including R&D) to the State (public authorities) in which the company is established;
- *Aerospace Manufacturers*: sales or services (including R&D) to other aerospace companies (generally sub-contracting);
- *Final Users*: sales or services (including R&D), i.e., neither to the State nor to other aerospace companies.

In the case of the "*Aerospace Manufacturers*" and the "*Final Users*", turnover is broken down between:

- *National*: sales or services in the country in which the company is established,
- *Other EU States*: sales or services in other EU countries,
- *Third Countries*: sales or services in a non-EU country.

The *activities* considered are:

- *R&D* contracts,
- *production* and assembly,
- post-delivery modifications, repairs and *maintenance* of material sold, where these operations are carried out by the company itself.

Repair and maintenance operations carried out by users, whether civil or military, are not covered by this survey.

Turnover relating to the category of customer "*National State*" is broken down between:

- *R&D contracts*,
- post-delivery modifications, repairs and *maintenance* of material sold, where these operations are carried out by the company itself and **not by the customer**, and
- *procurement*.

For the other two categories of customers, "*Aerospace Manufacturers*" and "*Final Users*", the data refer to all these activities.

PUBLIC FINANCING OF R&D

Data relating to *public financing of aerospace R&D* are supplied by *EUROSTAT* (Statistical Office of the EU). They cover on one hand public funds granted to industry, research centres, laboratories, universities, etc., in the field of aero-space equipment manufacturing and repairing productivity and technology. The data relating to the exploration and exploitation of space on the other hand comprise credits allocated to *ESA* (European Space Agency).

The very poor availability of the figures and the misleading and sometimes contradictory results, comparing with the DG III annual survey, will force us to cancel these tables in the next edition of the report.

FINANCIAL DATA

As to the European companies, the financial data published at the end of this chapter are extracted from "*L'industrie Aéronautique et Spatiale Mondiale*", a study by *EUROSTAF*, in collaboration with *AEROSPATIALE*. The US global data are taken from A.I.A.'s "*Aerospace Facts & Figures*" (source: Bureau of the Census).

The European data are aggregated by country, each table summing for the years available the major national producers:

- EU = aggregate of the six following countries:
- France = *Aérospatiale* + *Dassault Aviation* + *Matra* + *Snecma* + *Thomson-Csf*
- Germany = *Deutsche Aerospace* *Airbus* + *Dornier* + *MBB* + *MTU*
- Italy = *Agusta* + *Alenia* (*Aeritalia* & *Selenia*)
- Netherlands = *Fokker*
- Spain = *CASA*
- UK = *British Aerospace* + *Rolls-Royce* + *Westland*

For each country, the following series are provided:

- **turnover**
- **value added** = turnover *minus* external costs and expenses, excluding wage costs
- **wage costs**
- **trading income** = value added *minus* wage costs
- **net income** = trading income *minus* investments, financial costs and income taxes
- **equity** = assets *minus* all liabilities, except to shareholders

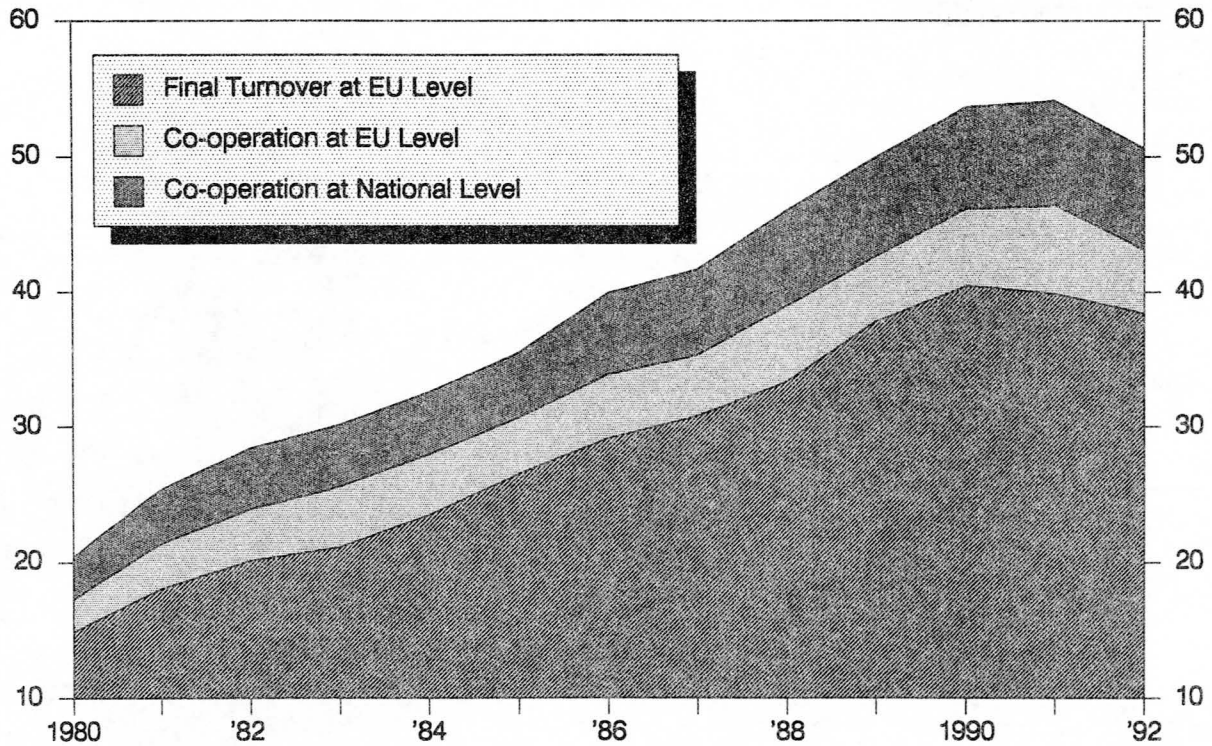
- **long and medium term debt**
- **total permanent liabilities** = equity *plus* long and medium term debt
- **permanent assets**
- **total R&D, of which industry-funded R&D**
- **operating investments**
- **employment**

The ratios are defined as follows:

- **apparent labor productivity** = value added on wage costs and per worker
 - **research effort** = total R&D and industry-funded R&D on turnover
 - **operating investments on value added**
 - **debt ratio**: long and medium term debt on permanent liabilities
 - **profitability**: trading income on value added and net income on value added, equity and assets
-

EU AEROSPACE TURNOVER

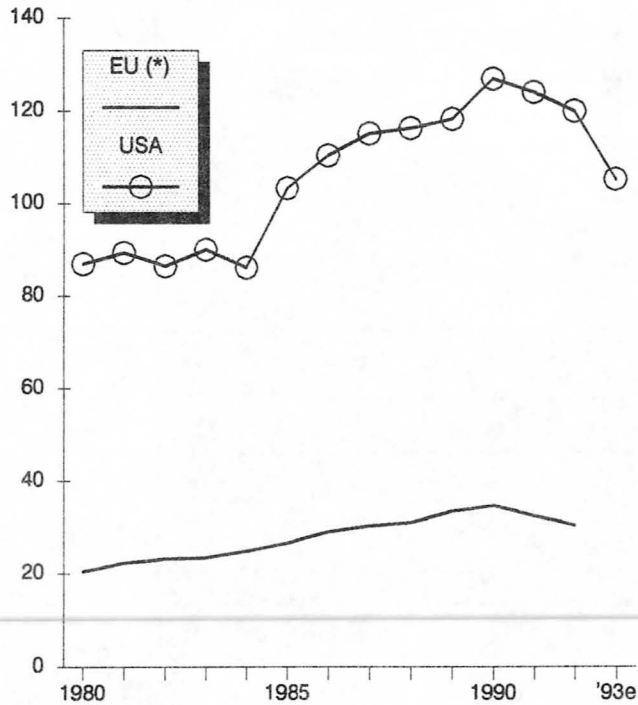
Billion ECU - Current Prices



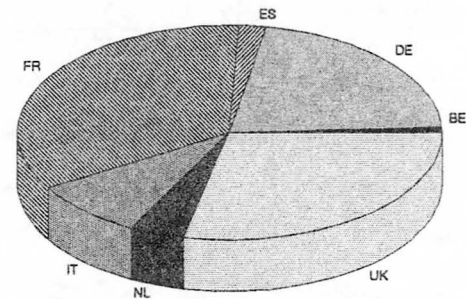
■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

EU and USA AEROSPACE TURNOVER

Billion Ecu - Constant Prices (1985)



(*) final t.o. consolidated at EU level



EU - Breakdown by Country (x)
1992 - current prices

(x) final t.o. consolidated at national level

EU OVERALL NON-CONSOLIDATED AEROSPACE TURNOVER

1) MIO ECU - CURRENT PRICES

	BE	DE (1)	ES	FR	IT	NL	UK (2)	EU
1980	333	3,359	185	7,270	1,230	372	7,646	20,394
1981	429	4,114	262	8,821	1,757	445	9,581	25,409
1982	413	5,084	356	9,813	2,181	492	10,080	28,419
1983	344	5,380	348	10,826	2,661	605	10,015	30,178
1984	287	5,628	407	11,729	2,767	594	11,210	32,622
1985	361	6,524	440	12,555	3,070	533	12,034	35,519
1986	338	9,780	377	13,168	3,421	584	12,252	39,920
1987	339	10,079	426	13,145	3,649	452	13,600	41,691
1988	329	11,190	649	14,267	3,960	880	14,769	46,044
1989	363	11,895	806	15,782	4,422	1,199	15,486	49,953
1990	437	12,364	961	17,147	4,940	1,385	16,403	53,637
1991	419	13,053	907	17,367	5,087	1,650	15,677	54,159
1992	405	10,866	914	17,418	5,014	1,795	14,205	50,616
1993 ESTIMATE	362	10,112	960	16,684	4,650	2,180	-	-

2) COMPARISON OF TURNOVER BY EU MEMBER STATE (EU = 100)

	BE	DE	ES	FR	IT	NL	UK
1980	1.6	16.5	0.9	35.6	6.0	1.8	37.5
1981	1.7	16.2	1.0	34.7	6.9	1.8	37.7
1982	1.5	17.9	1.3	34.5	7.7	1.7	35.5
1983	1.1	17.8	1.2	35.9	8.8	2.0	33.2
1984	0.9	17.3	1.2	36.0	8.5	1.8	34.4
1985	1.0	18.4	1.2	35.3	8.6	1.5	33.9
1986	0.8	24.5	0.9	33.0	8.6	1.5	30.7
1987	0.8	24.2	1.0	31.5	8.8	1.1	32.6
1988	0.7	24.3	1.4	31.0	8.6	1.9	32.1
1989	0.7	23.8	1.6	31.6	8.9	2.4	31.0
1990	0.8	23.1	1.8	32.0	9.2	2.6	30.6
1991	0.8	24.1	1.7	32.1	9.4	3.0	28.9
1992	0.8	21.5	1.8	34.4	9.9	3.5	28.1

(1) MAINTENANCE BY DEUTSCHE LUFTHANSA, CA 1240 MIO ECU IN 1992, NOT INCLUDED

(2) MAINTENANCE BY AIRLINES, CA 640 MIO ECU IN 1992, NOT INCLUDED

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

EU OVERALL NON-CONSOLIDATED AEROSPACE TURNOVER

3) MIO ECU - CONSTANT PRICES (1985)

	BE	DE	ES	FR	IT	NL	UK	EU
1980	398	4,470	244	9,750	1,968	483	10,837	28,150
1981	497	5,237	319	10,935	2,513	551	11,260	31,314
1982	484	5,860	399	11,566	2,789	542	11,166	32,804
1983	388	5,727	414	12,245	3,014	634	11,029	33,451
1984	308	5,779	434	12,552	2,872	608	11,883	34,435
1985	361	6,524	440	12,555	3,070	533	12,034	35,519
1986	317	9,050	361	12,514	3,201	556	13,498	39,497
1987	306	8,906	399	12,355	3,296	420	14,980	40,663
1988	295	9,753	556	13,203	3,449	809	14,388	42,452
1989	310	10,082	613	14,088	3,562	1,088	14,277	44,019
1990	355	10,041	675	14,625	3,725	1,213	15,084	45,718
1991	330	10,172	591	14,490	3,598	1,403	13,261	43,847
1992	302	7,978	580	13,877	3,526	1,472	12,119	39,852
1993 ESTIMATE	254	6,894	660	12,556	3,584	1,681	-	-

4) GROWTH RATE OF TURNOVER (AS % - CONSTANT PRICES)

	BE	DE	ES	FR	IT	NL	UK	EU
1981	25.0	17.1	30.7	12.2	27.7	14.1	3.9	11.2
1982	-2.8	11.9	25.0	5.8	11.0	-1.7	-0.8	4.8
1983	-19.7	-2.3	3.8	5.9	8.1	17.0	-1.2	2.0
1984	-20.6	0.9	4.8	2.5	-4.7	-4.1	7.7	2.9
1985	17.3	12.9	1.6	0.0	6.9	-12.3	1.3	3.1
1986	-12.2	38.7	-18.1	-0.3	4.3	4.3	12.2	11.2
1987	-3.5	-1.6	10.6	-1.3	3.0	-24.4	11.0	3.0
1988	-3.7	9.5	39.5	6.9	4.6	92.5	-4.0	4.4
1989	5.3	3.4	10.1	6.7	3.3	34.5	-0.8	3.7
1990	14.5	-0.4	10.2	3.8	4.6	11.6	5.6	3.9
1991	-6.9	1.3	-12.4	-0.9	-3.4	15.7	-12.1	-4.1
1992	-8.6	-21.6	-2.0	-4.2	-2.0	4.9	-8.6	-9.1
1993 ESTIMATE	-15.8	-13.6	13.8	-9.5	1.7	14.3	-	-

1980-92	-2.3	4.9	7.5	3.0	5.0	9.7	0.9	2.9
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■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

FINAL AEROSPACE TURNOVER CONSOLIDATED AT NATIONAL LEVEL

1) MIO ECU - CURRENT PRICES

	BE	DE	ES	FR	IT	NL	UK	EU	USA	JAPAN	CANADA
1980	320	2,710	184	5,992	1,028	371	6,648	17,253	34,041	1,273	1,353
1981	426	3,317	262	7,245	1,526	441	8,153	21,370	49,118	1,685	2,078
1982	409	4,112	354	7,982	1,866	486	8,706	23,915	59,945	2,540	2,292
1983	339	4,272	346	8,904	2,220	595	8,895	25,572	72,021	2,914	2,353
1984	284	4,515	397	9,967	2,332	584	9,890	27,969	84,171	3,642	3,187
1985	360	5,319	425	10,782	2,611	533	10,661	30,691	103,325	4,652	3,914
1986	336	7,901	359	10,966	2,851	584	10,905	33,902	86,465	4,815	3,456
1987	337	8,292	360	10,924	3,028	452	11,924	35,316	77,089	5,225	3,680
1988	328	9,117	609	11,852	3,286	880	12,864	38,935	77,449	5,831	4,114
1989	363	9,929	789	13,317	3,675	1,199	13,340	42,612	88,029	6,653	5,280
1990	436	10,168	931	14,593	4,106	1,385	14,513	46,131	85,161	5,833	5,097
1991	419	11,127	886	14,758	3,640	1,650	13,978	46,456	88,664	6,879	5,947
1992	405	9,148	897	14,805	3,780	1,795	12,282	43,112	83,865	8,008	5,337

2) COMPARISON OF TURNOVER BY GEOGRAPHICAL AREA (EU = 100)

	BE	DE	ES	FR	IT	NL	UK	EU	USA	JAPAN	CANADA
1980	1.9	15.7	1.1	34.7	6.0	2.1	38.5	100.0	197.3	7.4	7.8
1981	2.0	15.5	1.2	33.9	7.1	2.1	38.2	100.0	229.8	7.9	9.7
1982	1.7	17.2	1.5	33.4	7.8	2.0	36.4	100.0	250.7	10.6	9.6
1983	1.3	16.7	1.4	34.8	8.7	2.3	34.8	100.0	281.6	11.4	9.2
1984	1.0	16.1	1.4	35.6	8.3	2.1	35.4	100.0	300.9	13.0	11.4
1985	1.2	17.3	1.4	35.1	8.5	1.7	34.7	100.0	336.7	15.2	12.8
1986	1.0	23.3	1.1	32.3	8.4	1.7	32.2	100.0	255.0	14.2	10.2
1987	1.0	23.5	1.0	30.9	8.6	1.3	33.8	100.0	218.3	14.8	10.4
1988	0.8	23.4	1.6	30.4	8.4	2.3	33.0	100.0	198.9	15.0	10.6
1989	0.9	23.3	1.9	31.3	8.6	2.8	31.3	100.0	206.6	15.6	12.4
1990	0.9	22.0	2.0	31.6	8.9	3.0	31.5	100.0	184.6	12.6	11.0
1991	0.9	24.0	1.9	31.8	7.8	3.6	30.1	100.0	190.9	14.8	12.8
1992	0.9	21.2	2.1	34.3	8.8	4.2	28.5	100.0	194.5	18.6	12.4

■ SOURCE: INDUSTRIAL ASSOCIATIONS (EU: DG III ANNUAL SURVEY - USA: A.I.A.A. - JAPAN: S.J.A.C. - CANADA: A.I.A.C.)

FINAL AEROSPACE TURNOVER CONSOLIDATED AT NATIONAL LEVEL

3) MIO ECU - CONSTANT PRICES (1985)

	BE	DE	ES	FR	IT	NL	UK	EU	USA	JAPAN	CANADA
1980	382	3,607	244	8,036	1,646	482	9,421	23,817	86,865	2,467	2,819
1981	493	4,223	319	8,982	2,182	546	9,583	26,328	89,265	2,452	3,218
1982	479	4,739	396	9,409	2,387	535	9,644	27,588	86,375	3,610	2,949
1983	383	4,548	412	10,070	2,515	624	9,796	28,348	89,953	3,543	2,620
1984	305	4,636	423	10,666	2,421	597	10,484	29,532	86,081	3,832	3,205
1985	360	5,319	425	10,782	2,611	533	10,661	30,691	103,325	4,652	3,914
1986	316	7,311	344	10,421	2,668	556	12,013	33,629	110,304	4,322	4,428
1987	304	7,327	337	10,267	2,735	420	13,134	34,524	115,122	4,735	5,041
1988	293	7,946	523	10,968	2,862	809	12,532	35,932	116,294	4,786	5,123
1989	310	8,416	600	11,888	2,960	1,088	12,298	37,559	118,222	5,378	5,620
1990	355	8,258	654	12,446	3,096	1,213	13,346	39,367	126,884	5,582	5,985
1991	330	8,671	578	12,313	2,574	1,403	11,824	37,694	124,016	5,857	6,498
1992	301	6,716	569	11,796	2,658	1,472	10,479	33,991	119,984	6,603	6,376

4) GROWTH RATE OF TURNOVER (AS % - CONSTANT PRICES)

	BE	DE	ES	FR	IT	NL	UK	EU	USA	JAPAN	CANADA
1981	29.3	17.1	30.7	11.8	32.6	13.3	1.7	10.5	2.8	-0.6	14.2
1982	-2.9	12.2	24.4	4.7	9.4	-2.1	0.6	4.8	-3.2	47.2	-8.4
1983	-20.1	-4.0	3.9	7.0	5.4	16.7	1.6	2.8	4.1	-1.9	-11.2
1984	-20.3	1.9	2.6	5.9	-3.8	-4.2	7.0	4.2	-4.3	8.2	22.3
1985	18.0	14.7	0.5	1.1	7.8	-10.7	1.7	3.9	20.0	21.4	22.1
1986	-12.3	37.5	-19.0	-3.3	2.2	4.3	12.7	9.6	6.8	-7.1	13.1
1987	-3.8	0.2	-2.1	-1.5	2.5	-24.4	9.3	2.7	4.4	9.6	13.8
1988	-3.5	8.4	55.0	6.8	4.7	92.5	-4.6	4.1	1.0	1.1	1.6
1989	5.6	5.9	14.8	8.4	3.4	34.5	-1.9	4.5	1.7	12.4	9.7
1990	14.5	-1.9	9.0	4.7	4.6	11.6	8.5	4.8	7.3	3.8	6.5
1991	-7.0	5.0	-11.6	-1.1	-16.8	15.7	-11.4	-4.3	-2.3	4.9	8.6
1992	-8.6	-22.5	-1.5	-4.2	3.2	4.9	-11.4	-9.8	-3.3	12.7	-1.9
1980-92	-1.9	5.3	7.3	3.2	4.1	9.7	0.9	3.0	2.7	8.5	7.0

■ SOURCE: INDUSTRIAL ASSOCIATIONS (EU: DG III ANNUAL SURVEY - USA: A.I.A.A. - JAPAN: S.J.A.C. - CANADA: A.I.A.C.)

FINAL AEROSPACE TURNOVER CONSOLIDATED AT EU LEVEL

1) MIO ECU - CURRENT PRICES

	BE	DE	ES	FR	IT	NL	UK	EU	USA	JAPAN	CANADA
1980	263	1,880	160	5,437	760	365	6,018	14,884	34,041	1,273	1,353
1981	349	2,191	235	6,556	1,307	373	7,045	18,056	49,118	1,685	2,078
1982	338	2,782	334	7,303	1,623	408	7,328	20,115	59,945	2,540	2,292
1983	271	2,850	336	7,950	1,698	518	7,514	21,137	72,021	2,914	2,353
1984	205	3,009	376	9,082	1,744	528	8,561	23,504	84,171	3,642	3,187
1985	260	3,863	403	10,278	1,830	533	9,381	26,548	103,325	4,652	3,914
1986	227	6,224	342	10,264	1,977	584	9,548	29,167	86,465	4,815	3,456
1987	224	6,843	342	10,212	2,093	432	10,736	30,882	77,089	5,225	3,680
1988	246	7,338	582	10,740	2,260	858	11,368	33,392	77,449	5,831	4,114
1989	223	8,220	757	12,895	2,558	1,157	12,036	37,846	88,029	6,653	5,280
1990	244	8,242	873	13,903	2,867	1,336	12,994	40,459	85,161	5,833	5,097
1991	265	9,119	814	13,540	2,704	1,602	11,859	39,903	88,664	6,879	5,947
1992	256	7,716	826	13,970	2,811	1,751	11,053	38,383	83,865	8,008	5,337

2) COMPARISON OF TURNOVER BY GEOGRAPHICAL AREA (EU = 100)

	BE	DE	ES	FR	IT	NL	UK	EU	USA	JAPAN	CANADA
1980	1.8	12.6	1.1	36.5	5.1	2.5	40.4	100.0	228.7	8.6	9.1
1981	1.9	12.1	1.3	36.3	7.2	2.1	39.0	100.0	272.0	9.3	11.5
1982	1.7	13.8	1.7	36.3	8.1	2.0	36.4	100.0	298.0	12.6	11.4
1983	1.3	13.5	1.6	37.6	8.0	2.5	35.5	100.0	340.7	13.8	11.1
1984	0.9	12.8	1.6	38.6	7.4	2.2	36.4	100.0	358.1	15.5	13.6
1985	1.0	14.6	1.5	38.7	6.9	2.0	35.3	100.0	389.2	17.5	14.7
1986	0.8	21.3	1.2	35.2	6.8	2.0	32.7	100.0	296.5	16.5	11.8
1987	0.7	22.2	1.1	33.1	6.8	1.4	34.8	100.0	249.6	16.9	11.9
1988	0.7	22.0	1.7	32.2	6.8	2.6	34.0	100.0	231.9	17.5	12.3
1989	0.6	21.7	2.0	34.1	6.8	3.1	31.8	100.0	232.6	17.6	14.0
1990	0.6	20.4	2.2	34.4	7.1	3.3	32.1	100.0	210.5	14.4	12.6
1991	0.7	22.9	2.0	33.9	6.8	4.0	29.7	100.0	222.2	17.2	14.9
1992	0.7	20.1	2.2	36.4	7.3	4.6	28.8	100.0	218.5	20.9	13.9

■ SOURCE: INDUSTRIAL ASSOCIATIONS (EU: DGIII ANNUAL SURVEY - USA: A.I.A.A. - JAPAN: S.J.A.C. - CANADA: A.I.A.C.)

FINAL AEROSPACE TURNOVER CONSOLIDATED AT EU LEVEL

3) MIO ECU - CONSTANT PRICES (1985)

	BE	DE	ES	FR	IT	NL	UK	EU	USA	JAPAN	CANADA
1980	314	2,502	212	7,292	1,216	475	8,529	20,540	86,865	2,467	2,819
1981	405	2,789	286	8,128	1,869	462	8,280	22,219	89,265	2,452	3,218
1982	396	3,206	374	8,607	2,075	449	8,118	23,225	86,375	3,610	2,949
1983	306	3,034	399	8,992	1,923	543	8,274	23,472	89,953	3,543	2,620
1984	220	3,090	400	9,719	1,811	540	9,075	24,854	86,081	3,832	3,205
1985	260	3,863	403	10,278	1,830	533	9,381	26,548	103,325	4,652	3,914
1986	213	5,760	327	9,754	1,850	556	10,518	28,979	110,304	4,322	4,428
1987	202	6,047	320	9,597	1,890	401	11,826	30,284	115,122	4,735	5,041
1988	220	6,396	500	9,939	1,968	788	11,074	30,885	116,294	4,786	5,123
1989	191	6,968	575	11,511	2,061	1,049	11,096	33,451	118,222	5,378	5,620
1990	199	6,693	613	11,858	2,162	1,170	11,949	34,644	126,884	5,582	5,985
1991	209	7,107	531	11,297	1,913	1,363	10,031	32,451	124,016	5,857	6,498
1992	191	5,665	524	11,130	1,977	1,435	9,430	30,352	119,984	6,603	6,376

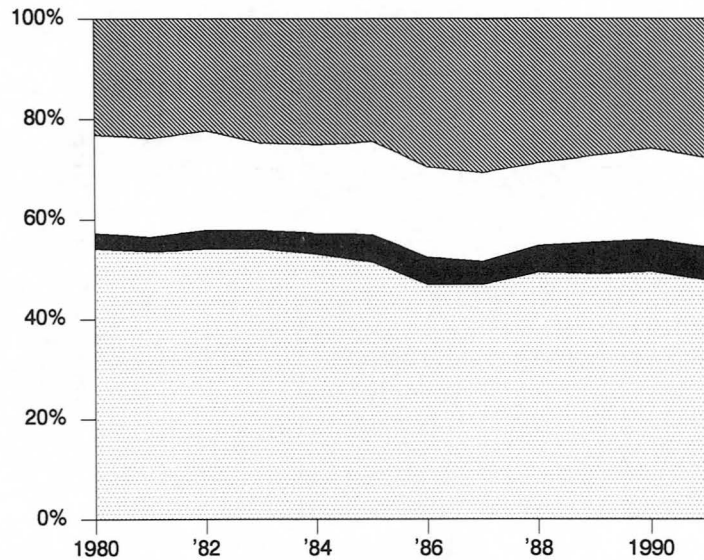
4) GROWTH RATE OF TURNOVER (AS % - CONSTANT PRICES)

	BE	DE	ES	FR	IT	NL	UK	EU	USA	JAPAN	CANADA
1981	29.2	11.5	35.0	11.5	53.7	-2.7	-2.9	8.2	2.8	-0.6	14.2
1982	-2.2	14.9	30.8	5.9	11.0	-2.9	-2.0	4.5	-3.2	47.2	-8.4
1983	-22.7	-5.4	6.8	4.5	-7.3	21.1	1.9	1.1	4.1	-1.9	-11.2
1984	-28.1	1.9	0.2	8.1	-5.9	-0.6	9.7	5.9	-4.3	8.2	22.3
1985	18.2	25.0	0.7	5.8	1.1	-1.2	3.4	6.8	20.0	21.4	22.1
1986	-18.0	49.1	-18.8	-5.1	1.1	4.2	12.1	9.2	6.8	-7.1	13.1
1987	-5.3	5.0	-2.2	-1.6	2.2	-27.7	12.4	4.5	4.4	9.6	13.8
1988	9.0	5.8	56.0	3.6	4.1	96.4	-6.4	2.0	1.0	1.1	1.6
1989	-13.5	8.9	15.0	15.8	4.7	33.1	0.2	8.3	1.7	12.4	9.7
1990	4.3	-3.9	6.7	3.0	4.9	11.5	7.7	3.6	7.3	3.8	6.5
1991	5.2	6.2	-13.4	-4.7	-11.5	16.4	-16.1	-6.3	-2.3	4.9	8.6
1992	-8.6	-20.3	-1.3	-1.5	3.4	5.3	-6.0	-6.5	-3.3	12.7	-1.9
1980-92	-4.0	7.0	7.8	3.6	4.1	9.7	0.8	3.3	2.7	8.5	7.0

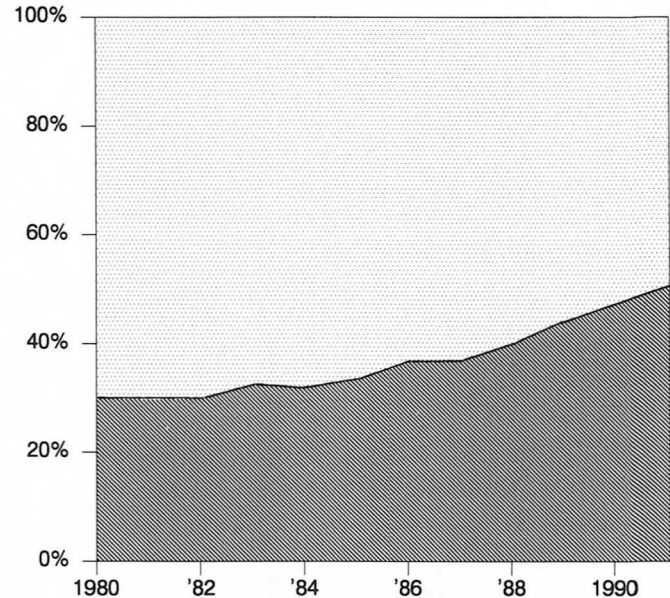
■ SOURCE: INDUSTRIAL ASSOCIATIONS (EU: DGIII ANNUAL SURVEY - USA: A.I.A.A. - JAPAN: S.J.A.C. - CANADA: A.I.A.C.)

EU OVERALL AEROSPACE TURNOVER BREAKDOWN

Breakdown by Sector



Breakdown by Destination



COMPARATIVE BREAKDOWN OF AEROSPACE TURNOVER

BY SECTOR AND BY DESTINATION (AS % OF TOTAL)

1A) EU: OVERALL - NON-CONSOLIDATED

	SECTOR				DESTINATION	
	AIRCRAFT AND MISSILES	SPACE	ENGINES	EQUIPMENT	CIVIL	MILITARY
1980	54.1	3.1	19.6	23.2	30.1	69.9
1981	53.5	2.9	19.8	23.8	29.8	70.2
1982	54.1	3.7	19.9	22.3	30.1	69.9
1983	54.0	3.8	17.4	24.9	32.5	67.5
1984	53.0	4.0	17.9	25.1	31.9	68.1
1985	51.4	5.4	18.7	24.5	33.5	66.5
1986	46.9	5.5	18.0	29.7	36.8	63.2
1987	46.9	4.6	17.8	30.6	36.9	63.1
1988	49.4	5.3	16.6	28.7	40.0	60.0
1989	49.0	6.3	17.5	27.3	44.2	55.8
1990	49.5	6.4	18.3	25.8	47.4	52.6
1991	47.7	6.7	17.8	27.8	50.8	49.2

1B) EU: FINAL - CONSOLIDATED AT EU-LEVEL

	SECTOR				DESTINATION	
	AIRCRAFT AND MISSILES	SPACE	ENGINES	EQUIPMENT	CIVIL	MILITARY
1980	59.4	3.1	20.6	16.9	28.5	71.5
1981	59.6	2.9	20.0	17.5	29.5	70.5
1982	60.8	2.7	20.4	16.1	28.4	71.6
1983	59.0	3.2	18.6	19.2	31.4	68.6
1984	57.4	3.7	18.8	20.1	31.4	68.6
1985	56.3	4.9	19.2	19.6	31.7	68.3
1986	52.3	4.9	19.2	23.6	37.0	63.1
1987	51.8	3.6	19.3	25.4	36.1	63.9
1988	53.5	4.9	17.8	23.8	38.9	61.1
1989	54.2	5.6	18.0	22.1	45.1	54.9
1990	55.3	4.4	19.0	21.4	46.7	53.3
1991	53.6	5.3	19.2	21.9	49.0	51.0

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

COMPARATIVE BREAKDOWN OF AEROSPACE TURNOVER

BY SECTOR AND BY DESTINATION (AS % OF TOTAL)

2) USA

	SECTOR				DESTINATION	
	AIRCRAFT AND MISSILES	SPACE	ENGINES	EQUIPMENT	CIVIL	MILITARY
1981	54.2	7.0	17.7	21.0	40.8	59.2
1982	49.2	8.1	17.4	25.3	29.4	70.6
1983	52.0	7.7	16.2	24.2	29.1	70.9
1984	51.7	7.9	17.1	23.3	25.9	74.1
1985	53.6	8.0	15.4	23.0	26.6	73.4
1986	54.3	7.4	15.0	23.3	27.4	72.6
1987	52.5	9.0	16.9	21.6	25.0	75.0
1988	49.3	9.4	20.1	21.1	28.5	71.5
1989	49.2	10.1	19.6	21.2	32.4	67.6
1990	54.4	8.9	18.1	18.5	39.0	61.0
1991	56.4	10.0	17.7	15.9	44.2	55.8
1992	-	-	-	-	46.6	53.4

3) JAPAN

	SECTOR				DESTINATION	
	AIRCRAFT AND MISSILES	SPACE	ENGINES	EQUIPMENT	CIVIL	MILITARY
1981	42.9	29.4	15.0	12.7	44.7	55.3
1982	45.6	27.3	14.1	13.1	43.9	56.1
1983	44.2	27.7	13.5	14.7	43.4	56.6
1984	47.8	21.7	15.0	15.5	35.4	64.6
1985	48.1	23.5	14.3	14.1	35.5	64.5
1986	45.0	21.6	15.2	18.2	34.5	65.5
1987	44.7	23.1	14.0	18.1	38.0	62.0
1988	43.0	25.1	13.8	18.0	40.8	59.2
1989	40.3	27.7	13.6	18.4	44.8	55.2
1990	41.2	25.2	14.4	19.2	43.9	56.1
1991	43.2	25.7	14.7	16.4	44.2	55.8
1992	-	25.9	-	-	44.1	55.9

■ SOURCE: INDUSTRIAL ASSOCIATIONS (USA: A.I.A.A./JAPAN: S.J.A.C.)

BREAKDOWN OF EU OVERALL AEROSPACE TURNOVER

TOTAL (MIO ECUS AT CURRENT PRICES)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
NATIONAL STATE	6,776	7,285	8,188	9,323	10,639	11,934	13,139	13,431	14,236	14,838	15,784
.. R-D CONTRACTS	2,061	2,153	2,492	2,879	3,119	3,560	3,907	3,445	4,256	4,793	6,108
.. MAINTENANCE	1,151	1,251	1,236	1,603	1,684	1,959	2,144	2,313	2,570	2,913	3,635
.. PROCUREMENT	3,565	3,880	4,460	4,840	5,836	6,416	7,089	7,673	7,410	7,132	6,041
AEROSPACE MANUFACTURERS	9,077	10,149	10,897	11,345	11,950	14,682	14,477	16,601	15,644	18,914	19,882
.. NATIONAL	4,039	4,504	4,607	4,653	4,829	6,018	6,375	7,108	7,341	7,505	7,703
.. IN OTHER EU STATES	3,314	3,799	4,435	4,465	4,141	4,734	4,433	5,544	4,766	5,672	6,553
.. IN THIRD COUNTRIES	1,725	1,846	1,855	2,228	2,980	3,930	3,669	3,949	3,537	5,737	5,626
FINAL USERS	9,556	10,985	11,094	11,954	12,931	13,304	14,075	16,012	20,073	19,885	18,493
.. NATIONAL	878	911	850	1,123	1,420	1,561	1,543	1,886	2,579	3,031	3,033
.. IN OTHER EU STATES	2,291	2,883	2,796	2,922	2,891	2,705	2,966	3,661	3,685	4,214	5,272
.. IN THIRD COUNTRIES	6,387	7,190	7,449	7,909	8,619	9,038	9,566	10,465	13,809	12,640	10,188
GRAND TOTAL	25,409	28,419	30,178	32,622	35,519	39,920	41,691	46,044	49,953	53,637	54,159
EU PUBLIC MARKET.....(1)	8,247	9,029	9,777	10,941	11,998	13,324	14,525	14,857	15,738	15,949	17,286
EU COMMERCIAL MARKET..(2)	9,050	10,354	11,097	11,544	11,922	13,629	13,931	16,773	16,868	19,312	21,059
EXPORTS.....(3)	8,112	9,036	9,304	10,137	11,600	12,968	13,235	14,414	17,347	18,376	15,814

(1) NATIONAL STATE + OTHER EU FINAL MILITARY USERS

(2) NATIONAL AND OTHER EU CIVIL AND MILITARY MANUFACTURERS AND FINAL CIVIL USERS

(3) MANUFACTURERS AND FINAL USERS OF THIRD COUNTRIES

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

BREAKDOWN OF EU OVERALL AEROSPACE TURNOVER

TOTAL (AS % OF GRAND TOTAL)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
NATIONAL STATE	26.7	25.6	27.1	28.6	30.0	29.9	31.5	29.2	28.5	27.7	29.1
.. R-D CONTRACTS	8.1	7.6	8.3	8.8	8.8	8.9	9.4	7.5	8.5	8.9	11.3
.. MAINTENANCE	4.5	4.4	4.1	4.9	4.7	4.9	5.1	5.0	5.1	5.4	6.7
.. PROCUREMENT	14.0	13.7	14.8	14.8	16.4	16.1	17.0	16.7	14.8	13.3	11.2
AEROSPACE MANUFACTURERS	35.7	35.7	36.1	34.8	33.6	36.8	34.7	36.1	31.3	35.3	36.7
.. NATIONAL	15.9	15.8	15.3	14.3	13.6	15.1	15.3	15.4	14.7	14.0	14.2
.. IN OTHER EU STATES	13.0	13.4	14.7	13.7	11.7	11.9	10.6	12.0	9.5	10.6	12.1
.. IN THIRD COUNTRIES	6.8	6.5	6.1	6.8	8.4	9.8	8.8	8.6	7.1	10.7	10.4
FINAL USERS	37.6	38.7	36.8	36.6	36.4	33.3	33.8	34.8	40.2	37.1	34.1
.. NATIONAL	3.5	3.2	2.8	3.4	4.0	3.9	3.7	4.1	5.2	5.7	5.6
.. IN OTHER EU STATES	9.0	10.1	9.3	9.0	8.1	6.8	7.1	8.0	7.4	7.9	9.7
.. IN THIRD COUNTRIES	25.1	25.3	24.7	24.2	24.3	22.6	22.9	22.7	27.6	23.6	18.8
GRAND TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
EU PUBLIC MARKET.....(1)	32.5	31.8	32.4	33.5	33.8	33.4	34.8	32.3	31.5	29.7	31.9
EU COMMERCIAL MARKET..(2)	35.6	36.4	36.8	35.4	33.6	34.1	33.4	36.4	33.8	36.0	38.9
EXPORTS.....(3)	31.9	31.8	30.8	31.1	32.7	32.5	31.7	31.3	34.7	34.3	29.2

(1) NATIONAL STATE + OTHER EU FINAL MILITARY USERS

(2) NATIONAL AND OTHER EU CIVIL AND MILITARY MANUFACTURERS AND FINAL CIVIL USERS

(3) MANUFACTURERS AND FINAL USERS OF THIRD COUNTRIES

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

BREAKDOWN OF EU OVERALL AEROSPACE TURNOVER

CIVIL SECTOR (MIO ECUS AT CURRENT PRICES)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
NATIONAL STATE	572	677	896	753	943	1,438	2,041	1,807	2,631	3,191	3,184
.. R-D CONTRACTS	276	347	334	360	554	716	1,000	631	1,083	1,404	1,952
.. MAINTENANCE	68	58	64	58	74	56	154	178	303	331	306
.. PROCUREMENT	228	273	498	335	315	666	887	999	1,244	1,456	925
AEROSPACE MANUFACTURERS	3,250	3,887	4,231	4,448	5,151	6,144	6,823	8,062	7,551	10,561	12,378
.. NATIONAL	1,495	1,644	1,888	1,787	2,046	2,356	2,559	2,959	2,801	3,383	4,098
.. IN OTHER EU STATES	760	1,195	1,272	1,240	1,426	1,562	1,679	2,453	2,187	3,148	3,887
.. IN THIRD COUNTRIES	995	1,048	1,071	1,422	1,679	2,226	2,585	2,650	2,563	4,030	4,393
FINAL USERS	3,753	3,983	4,680	5,204	5,805	7,113	6,520	8,543	11,890	11,689	11,961
.. NATIONAL	878	911	850	1,123	1,420	1,561	1,543	1,886	2,579	3,031	3,033
.. IN OTHER EU STATES	820	1,139	1,206	1,303	1,532	1,315	1,580	2,235	2,182	3,103	3,770
.. IN THIRD COUNTRIES	2,056	1,933	2,625	2,777	2,853	4,236	3,397	4,422	7,129	5,555	5,158
TOTAL	7,575	8,548	9,808	10,405	11,900	14,695	15,384	18,412	22,071	25,441	27,523
EU PUBLIC MARKET.....(1)	572	677	896	753	943	1,438	2,041	1,807	2,631	3,191	3,184
EU COMMERCIAL MARKET..(2)	3,952	4,889	5,216	5,453	6,424	6,794	7,360	9,533	9,748	12,665	14,788
EXPORTS.....(3)	3,051	2,981	3,695	4,199	4,532	6,463	5,982	7,072	9,692	9,585	9,551

(1) NATIONAL STATE

(2) NATIONAL AND OTHER EU CIVIL MANUFACTURERS AND FINAL CIVIL USERS

(3) MANUFACTURERS AND FINAL USERS OF THIRD COUNTRIES

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

BREAKDOWN OF EU OVERALL AEROSPACE TURNOVER

CIVIL SECTOR (AS % OF GRAND TOTAL)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
NATIONAL STATE	2.3	2.4	3.0	2.3	2.7	3.6	4.9	3.9	5.3	5.9	5.9
.. R-D CONTRACTS	1.1	1.2	1.1	1.1	1.6	1.8	2.4	1.4	2.2	2.6	3.6
.. MAINTENANCE	0.3	0.2	0.2	0.2	0.2	0.1	0.4	0.4	0.6	0.6	0.6
.. PROCUREMENT	0.9	1.0	1.6	1.0	0.9	1.7	2.1	2.2	2.5	2.7	1.7
AEROSPACE MANUFACTURERS	12.8	13.7	14.0	13.6	14.5	15.4	16.4	17.5	15.1	19.7	22.9
.. NATIONAL	5.9	5.8	6.3	5.5	5.8	5.9	6.1	6.4	5.6	6.3	7.6
.. IN OTHER EU STATES	3.0	4.2	4.2	3.8	4.0	3.9	4.0	5.3	4.4	5.9	7.2
.. IN THIRD COUNTRIES	3.9	3.7	3.5	4.4	4.7	5.6	6.2	5.8	5.1	7.5	8.1
FINAL USERS	14.8	14.0	15.5	16.0	16.3	17.8	15.6	18.6	23.8	21.8	22.1
.. NATIONAL	3.5	3.2	2.8	3.4	4.0	3.9	3.7	4.1	5.2	5.7	5.6
.. IN OTHER EU STATES	3.2	4.0	4.0	4.0	4.3	3.3	3.8	4.9	4.4	5.8	7.0
.. IN THIRD COUNTRIES	8.1	6.8	8.7	8.5	8.0	10.6	8.1	9.6	14.3	10.4	9.5
TOTAL	29.8	30.1	32.5	31.9	33.5	36.8	36.9	40.0	44.2	47.4	50.8
EU PUBLIC MARKET.....(1)	2.3	2.4	3.0	2.3	2.7	3.6	4.9	3.9	5.3	5.9	5.9
EU COMMERCIAL MARKET..(2)	15.6	17.2	17.3	16.7	18.1	17.0	17.7	20.7	19.5	23.6	27.3
EXPORTS.....(3)	12.0	10.5	12.2	12.9	12.8	16.2	14.3	15.4	19.4	17.9	17.6

(1) NATIONAL STATE

(2) NATIONAL AND OTHER EU CIVIL MANUFACTURERS AND FINAL CIVIL USERS

(3) MANUFACTURERS AND FINAL USERS OF THIRD COUNTRIES

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

BREAKDOWN OF EU OVERALL AEROSPACE TURNOVER

MILITARY SECTOR (MIO ECUS AT CURRENT PRICES)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
NATIONAL STATE	6,204	6,607	7,291	8,570	9,695	10,496	11,098	11,624	11,605	11,647	12,600
.. R-D CONTRACTS	1,785	1,807	2,157	2,519	2,565	2,844	2,907	2,814	3,173	3,389	4,156
.. MAINTENANCE	1,083	1,192	1,172	1,546	1,609	1,903	1,989	2,135	2,266	2,581	3,329
.. PROCUREMENT	3,336	3,608	3,962	4,505	5,521	5,750	6,201	6,675	6,166	5,676	5,116
AEROSPACE MANUFACTURERS	5,828	6,262	6,666	6,897	6,799	8,538	7,654	8,539	8,093	8,354	7,504
.. NATIONAL	2,544	2,860	2,719	2,866	2,783	3,662	3,816	4,150	4,540	4,123	3,605
.. IN OTHER EU STATES	2,554	2,604	3,163	3,225	2,714	3,172	2,754	3,090	2,579	2,524	2,666
.. IN THIRD COUNTRIES	730	797	784	806	1,301	1,703	1,084	1,299	974	1,707	1,233
FINAL USERS	5,802	7,002	6,414	6,750	7,125	6,191	7,555	7,469	8,183	8,196	6,531
.. NATIONAL	-	-	-	-	-	-	-	-	-	-	-
.. IN OTHER EU STATES	1,472	1,744	1,590	1,618	1,359	1,390	1,386	1,426	1,502	1,111	1,502
.. IN THIRD COUNTRIES	4,331	5,257	4,824	5,132	5,766	4,801	6,169	6,043	6,680	7,085	5,029
TOTAL	17,834	19,871	20,371	22,216	23,619	25,225	26,307	27,631	27,881	28,196	26,636
EU PUBLIC MARKET.....(1)	7,676	8,351	8,881	10,188	11,054	11,886	12,484	13,050	13,108	12,758	14,102
EU COMMERCIAL MARKET..(2)	5,098	5,465	5,881	6,091	5,497	6,834	6,570	7,240	7,119	6,647	6,271
EXPORTS.....(3)	5,061	6,055	5,608	5,938	7,068	6,505	7,253	7,342	7,655	8,791	6,263

(1) NATIONAL STATE + OTHER EU FINAL MILITARY USERS

(2) NATIONAL AND OTHER EU MILITARY MANUFACTURERS

(3) MANUFACTURERS AND FINAL USERS OF THIRD COUNTRIES

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

BREAKDOWN OF EU OVERALL AEROSPACE TURNOVER

MILITARY SECTOR (AS % OF GRAND TOTAL)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
NATIONAL STATE	24.4	23.2	24.2	26.3	27.3	26.3	26.6	25.2	23.2	21.7	23.3
.. R-D CONTRACTS	7.0	6.4	7.1	7.7	7.2	7.1	7.0	6.1	6.4	6.3	7.7
.. MAINTENANCE	4.3	4.2	3.9	4.7	4.5	4.8	4.8	4.6	4.5	4.8	6.1
.. PROCUREMENT	13.1	12.7	13.1	13.8	15.5	14.4	14.9	14.5	12.3	10.6	9.4
AEROSPACE MANUFACTURERS	22.9	22.0	22.1	21.1	19.1	21.4	18.4	18.5	16.2	15.6	13.9
.. NATIONAL	10.0	10.1	9.0	8.8	7.8	9.2	9.2	9.0	9.1	7.7	6.7
.. IN OTHER EU STATES	10.1	9.2	10.5	9.9	7.6	7.9	6.6	6.7	5.2	4.7	4.9
.. IN THIRD COUNTRIES	2.9	2.8	2.6	2.5	3.7	4.3	2.6	2.8	2.0	3.2	2.3
FINAL USERS	22.8	24.6	21.3	20.7	20.1	15.5	18.1	16.2	16.4	15.3	12.1
.. NATIONAL	-	-	-	-	-	-	-	-	-	-	-
.. IN OTHER EU STATES	5.8	6.1	5.3	5.0	3.8	3.5	3.3	3.1	3.0	2.1	2.8
.. IN THIRD COUNTRIES	17.0	18.5	16.0	15.7	16.2	12.0	14.8	13.1	13.4	13.2	9.3
TOTAL	70.2	69.9	67.5	68.1	66.5	63.2	63.1	60.0	55.8	52.6	49.2
EU PUBLIC MARKET.....(1)	30.2	29.4	29.4	31.2	31.1	29.8	29.9	28.3	26.2	23.8	26.0
EU COMMERCIAL MARKET..(2)	20.1	19.2	19.5	18.7	15.5	17.1	15.8	15.7	14.3	12.4	11.6
EXPORTS.....(3)	19.9	21.3	18.6	18.2	19.9	16.3	17.4	15.9	15.3	16.4	11.6

(1) NATIONAL STATE + OTHER EU FINAL MILITARY USERS

(2) NATIONAL AND OTHER EU MILITARY MANUFACTURERS

(3) MANUFACTURERS AND FINAL USERS OF THIRD COUNTRIES

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

BREAKDOWN OF EU OVERALL AEROSPACE TURNOVER

AIRFRAME AND MISSILES SECTOR (MIO ECUS AT CURRENT PRICES)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
NATIONAL STATE	3,697	3,815	4,248	4,528	5,602	5,814	6,360	6,233	7,049	7,380	7,996
.. R-D CONTRACTS	1,133	1,137	1,312	1,590	1,653	1,953	2,031	1,694	2,418	2,345	2,657
.. MAINTENANCE	600	657	626	818	836	964	1,080	1,147	1,329	1,630	2,156
.. PROCUREMENT	1,963	2,021	2,310	2,120	3,112	2,898	3,249	3,392	3,302	3,406	3,182
AEROSPACE MANUFACTURERS	3,210	3,653	4,213	4,218	4,053	4,927	4,351	6,100	4,881	6,631	6,898
.. NATIONAL	1,212	1,356	1,441	1,343	1,315	1,407	1,494	2,172	1,965	1,803	1,435
.. IN OTHER EU STATES	1,624	1,791	2,383	2,461	1,984	2,038	2,059	2,705	2,003	2,364	3,025
.. IN THIRD COUNTRIES	374	506	389	415	754	1,482	799	1,223	913	2,464	2,438
FINAL USERS	6,683	7,918	7,833	8,546	8,591	7,963	8,838	10,416	12,546	12,515	10,941
.. NATIONAL	410	473	335	500	568	368	367	425	855	1,323	1,316
.. IN OTHER EU STATES	1,322	1,846	1,791	1,705	1,745	1,298	1,482	2,198	2,715	3,174	3,673
.. IN THIRD COUNTRIES	4,951	5,599	5,708	6,341	6,278	6,297	6,989	7,792	8,976	8,018	5,952
TOTAL	13,589	15,386	16,294	17,292	18,246	18,704	19,549	22,749	24,476	26,526	25,835
EU PUBLIC MARKET.....(1)	4,457	4,779	5,030	5,254	6,186	6,166	6,712	6,665	7,990	8,042	8,784
EU COMMERCIAL MARKET..(2)	3,807	4,503	5,167	5,283	5,028	4,759	5,050	7,069	6,597	8,003	8,662
EXPORTS.....(3)	5,325	6,104	6,097	6,756	7,032	7,778	7,788	9,016	9,889	10,482	8,389

(1) NATIONAL STATE + OTHER EU FINAL MILITARY USERS

(2) NATIONAL AND OTHER EU CIVIL AND MILITARY MANUFACTURERS AND FINAL CIVIL USERS

(3) MANUFACTURERS AND FINAL USERS OF THIRD COUNTRIES

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

BREAKDOWN OF EU OVERALL AEROSPACE TURNOVER

AIRFRAME AND MISSILES SECTOR (AS % OF GRAND TOTAL)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
NATIONAL STATE	14.5	13.4	14.1	13.9	15.8	14.6	15.3	13.5	14.1	13.8	14.8
.. R-D CONTRACTS	4.5	4.0	4.3	4.9	4.7	4.9	4.9	3.7	4.8	4.4	4.9
.. MAINTENANCE	2.4	2.3	2.1	2.5	2.4	2.4	2.6	2.5	2.7	3.0	4.0
.. PROCUREMENT	7.7	7.1	7.7	6.5	8.8	7.3	7.8	7.4	6.6	6.4	5.9
AEROSPACE MANUFACTURERS	12.6	12.9	14.0	12.9	11.4	12.3	10.4	13.2	9.8	12.4	12.7
.. NATIONAL	4.8	4.8	4.8	4.1	3.7	3.5	3.6	4.7	3.9	3.4	2.7
.. IN OTHER EU STATES	6.4	6.3	7.9	7.5	5.6	5.1	4.9	5.9	4.0	4.4	5.6
.. IN THIRD COUNTRIES	1.5	1.8	1.3	1.3	2.1	3.7	1.9	2.7	1.8	4.6	4.5
FINAL USERS	26.3	27.9	26.0	26.2	24.2	19.9	21.2	22.6	25.1	23.3	20.2
.. NATIONAL	1.6	1.7	1.1	1.5	1.6	0.9	0.9	0.9	1.7	2.5	2.4
.. IN OTHER EU STATES	5.2	6.5	5.9	5.2	4.9	3.3	3.6	4.8	5.4	5.9	6.8
.. IN THIRD COUNTRIES	19.5	19.7	18.9	19.4	17.7	15.8	16.8	16.9	18.0	14.9	11.0
TOTAL	53.5	54.1	54.0	53.0	51.4	46.9	46.9	49.4	49.0	49.5	47.7
EU PUBLIC MARKET.....(1)	17.5	16.8	16.7	16.1	17.4	15.4	16.1	14.5	16.0	15.0	16.2
EU COMMERCIAL MARKET..(2)	15.0	15.8	17.1	16.2	14.2	11.9	12.1	15.4	13.2	14.9	16.0
EXPORTS.....(3)	21.0	21.5	20.2	20.7	19.8	19.5	18.7	19.6	19.8	19.5	15.5

(1) NATIONAL STATE + OTHER EU FINAL MILITARY USERS

(2) NATIONAL AND OTHER EU CIVIL AND MILITARY MANUFACTURERS AND FINAL CIVIL USERS

(3) MANUFACTURERS AND FINAL USERS OF THIRD COUNTRIES

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

BREAKDOWN OF EU OVERALL AEROSPACE TURNOVER

SPACE SECTOR (MIO ECUS AT CURRENT PRICES)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
NATIONAL STATE	242	351	450	475	741	483	554	799	1,063	1,083	1,369
.. R-D CONTRACTS	152	214	259	283	479	235	289	398	605	532	1,111
.. MAINTENANCE	1	3	5	6	18	15	30	26	17	10	48
.. PROCUREMENT	90	134	185	185	243	233	235	374	441	541	209
AEROSPACE MANUFACTURERS	227	534	509	505	659	832	894	843	1,109	1,843	1,596
.. NATIONAL	69	147	95	108	214	255	434	308	435	463	651
.. IN OTHER EU STATES	143	362	353	339	414	519	391	503	556	1,192	887
.. IN THIRD COUNTRIES	16	24	61	59	31	58	68	32	117	188	58
FINAL USERS	272	161	174	331	525	877	481	799	954	506	685
.. NATIONAL	14	13	17	95	219	341	234	334	294	331	306
.. IN OTHER EU STATES	147	81	91	185	221	170	169	311	187	100	221
.. IN THIRD COUNTRIES	111	67	66	52	85	365	77	154	473	75	158
TOTAL	742	1,046	1,132	1,311	1,925	2,191	1,928	2,441	3,125	3,432	3,650
EU PUBLIC MARKET.....(1)	242	351	450	475	741	484	554	862	1,168	1,087	1,372
EU COMMERCIAL MARKET..(2)	373	603	555	725	1,067	1,285	1,229	1,393	1,368	2,082	2,062
EXPORTS.....(3)	127	91	127	111	116	423	146	186	590	263	216

(1) NATIONAL STATE + OTHER EU FINAL MILITARY USERS

(2) NATIONAL AND OTHER EU CIVIL AND MILITARY MANUFACTURERS AND FINAL CIVIL USERS

(3) MANUFACTURERS AND FINAL USERS OF THIRD COUNTRIES

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

BREAKDOWN OF EU OVERALL AEROSPACE TURNOVER

SPACE SECTOR (AS % OF GRAND TOTAL)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
NATIONAL STATE	1.0	1.2	1.5	1.5	2.1	1.2	1.3	1.7	2.1	2.0	2.5
.. R-D CONTRACTS	0.6	0.8	0.9	0.9	1.3	0.6	0.7	0.9	1.2	1.0	2.1
.. MAINTENANCE	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.1
.. PROCUREMENT	0.4	0.5	0.6	0.6	0.7	0.6	0.6	0.8	0.9	1.0	0.4
AEROSPACE MANUFACTURERS	0.9	1.9	1.7	1.5	1.9	2.1	2.1	1.8	2.2	3.4	2.9
.. NATIONAL	0.3	0.5	0.3	0.3	0.6	0.6	1.0	0.7	0.9	0.9	1.2
.. IN OTHER EU STATES	0.6	1.3	1.2	1.0	1.2	1.3	0.9	1.1	1.1	2.2	1.6
.. IN THIRD COUNTRIES	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.4	0.1
FINAL USERS	1.1	0.6	0.6	1.0	1.5	2.2	1.2	1.7	1.9	0.9	1.3
.. NATIONAL	0.1	0.0	0.1	0.3	0.6	0.9	0.6	0.7	0.6	0.6	0.6
.. IN OTHER EU STATES	0.6	0.3	0.3	0.6	0.6	0.4	0.4	0.7	0.4	0.2	0.4
.. IN THIRD COUNTRIES	0.4	0.2	0.2	0.2	0.2	0.9	0.2	0.3	0.9	0.1	0.3
TOTAL	2.9	3.7	3.8	4.0	5.4	5.5	4.6	5.3	6.3	6.4	6.7
EU PUBLIC MARKET.....(1)	1.0	1.2	1.5	1.5	2.1	1.2	1.3	1.9	2.3	2.0	2.5
EU COMMERCIAL MARKET..(2)	1.5	2.1	1.8	2.2	3.0	3.2	2.9	3.0	2.7	3.9	3.8
EXPORTS.....(3)	0.5	0.3	0.4	0.3	0.3	1.1	0.3	0.4	1.2	0.5	0.4

(1) NATIONAL STATE + OTHER EU FINAL MILITARY USERS

(2) NATIONAL AND OTHER EU CIVIL AND MILITARY MANUFACTURERS AND FINAL CIVIL USERS

(3) MANUFACTURERS AND FINAL USERS OF THIRD COUNTRIES

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

BREAKDOWN OF EU OVERALL AEROSPACE TURNOVER

ENGINE SECTOR (MIO ECUS AT CURRENT PRICES)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
NATIONAL STATE	1,175	1,281	1,255	1,373	1,360	1,537	1,751	1,723	1,852	1,982	2,020
.. R-D CONTRACTS	324	346	375	290	324	252	390	338	385	784	1,151
.. MAINTENANCE	297	325	326	389	374	352	367	431	443	358	393
.. PROCUREMENT	553	610	555	694	661	933	995	953	1,024	840	476
AEROSPACE MANUFACTURERS	2,195	2,377	2,203	2,490	2,822	3,114	3,340	3,564	3,604	4,265	3,964
.. NATIONAL	877	975	738	775	951	885	842	833	1,119	1,268	1,112
.. IN OTHER EU STATES	532	566	580	637	608	692	649	873	789	888	853
.. IN THIRD COUNTRIES	786	836	886	1,078	1,263	1,537	1,850	1,858	1,697	2,108	2,000
FINAL USERS	1,658	1,984	1,791	1,973	2,477	2,533	2,350	2,356	3,275	3,590	3,646
.. NATIONAL	234	214	294	237	293	440	402	459	500	623	647
.. IN OTHER EU STATES	656	802	769	885	763	792	858	837	279	301	616
.. IN THIRD COUNTRIES	769	967	728	851	1,421	1,301	1,090	1,061	2,496	2,666	2,383
TOTAL	5,028	5,642	5,249	5,836	6,659	7,184	7,442	7,643	8,731	9,836	9,629
EU PUBLIC MARKET.....(1)	1,796	1,947	1,959	2,202	2,044	2,283	2,581	2,472	2,062	2,184	2,443
EU COMMERCIAL MARKET..(2)	1,677	1,891	1,676	1,705	1,930	2,063	1,921	2,253	2,476	2,878	2,804
EXPORTS.....(3)	1,555	1,803	1,613	1,929	2,684	2,838	2,940	2,919	4,193	4,774	4,382

(1) NATIONAL STATE + OTHER EU FINAL MILITARY USERS

(2) NATIONAL AND OTHER EU CIVIL AND MILITARY MANUFACTURERS AND FINAL CIVIL USERS

(3) MANUFACTURERS AND FINAL USERS OF THIRD COUNTRIES

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

BREAKDOWN OF EU OVERALL AEROSPACE TURNOVER

ENGINE SECTOR (AS % OF GRAND TOTAL)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
NATIONAL STATE	4.6	4.5	4.2	4.2	3.8	3.9	4.2	3.7	3.7	3.7	3.7
.. R-D CONTRACTS	1.3	1.2	1.2	0.9	0.9	0.6	0.9	0.7	0.8	1.5	2.1
.. MAINTENANCE	1.2	1.1	1.1	1.2	1.1	0.9	0.9	0.9	0.9	0.7	0.7
.. PROCUREMENT	2.2	2.1	1.8	2.1	1.9	2.3	2.4	2.1	2.1	1.6	0.9
AEROSPACE MANUFACTURERS	8.6	8.4	7.3	7.6	7.9	7.8	8.0	7.7	7.2	8.0	7.3
.. NATIONAL	3.5	3.4	2.4	2.4	2.7	2.2	2.0	1.8	2.2	2.4	2.1
.. IN OTHER EU STATES	2.1	2.0	1.9	2.0	1.7	1.7	1.6	1.9	1.6	1.7	1.6
.. IN THIRD COUNTRIES	3.1	2.9	2.9	3.3	3.6	3.8	4.4	4.0	3.4	3.9	3.7
FINAL USERS	6.5	7.0	5.9	6.0	7.0	6.3	5.6	5.1	6.6	6.7	6.7
.. NATIONAL	0.9	0.8	1.0	0.7	0.8	1.1	1.0	1.0	1.0	1.2	1.2
.. IN OTHER EU STATES	2.6	2.8	2.5	2.7	2.1	2.0	2.1	1.8	0.6	0.6	1.1
.. IN THIRD COUNTRIES	3.0	3.4	2.4	2.6	4.0	3.3	2.6	2.3	5.0	5.0	4.4
TOTAL	19.8	19.9	17.4	17.9	18.7	18.0	17.8	16.6	17.5	18.3	17.8
EU PUBLIC MARKET.....(1)	7.1	6.9	6.5	6.7	5.8	5.7	6.2	5.4	4.1	4.1	4.5
EU COMMERCIAL MARKET..(2)	6.6	6.7	5.6	5.2	5.4	5.2	4.6	4.9	5.0	5.4	5.2
EXPORTS.....(3)	6.1	6.3	5.3	5.9	7.6	7.1	7.1	6.3	8.4	8.9	8.1

(1) NATIONAL STATE + OTHER EU FINAL MILITARY USERS

(2) NATIONAL AND OTHER EU CIVIL AND MILITARY MANUFACTURERS AND FINAL CIVIL USERS

(3) MANUFACTURERS AND FINAL USERS OF THIRD COUNTRIES

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

BREAKDOWN OF EU OVERALL AEROSPACE TURNOVER

EQUIPMENT SECTOR (MIO ECUS AT CURRENT PRICES)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
NATIONAL STATE	1,663	1,837	2,234	2,947	2,937	4,100	4,474	4,677	4,273	4,392	4,400
.. R-D CONTRACTS	451	456	546	716	663	1,120	1,197	1,015	849	1,133	1,189
.. MAINTENANCE	253	266	278	390	455	628	667	708	781	915	1,038
.. PROCUREMENT	958	1,115	1,410	1,841	1,819	2,352	2,610	2,954	2,643	2,345	2,174
AEROSPACE MANUFACTURERS	3,445	3,586	3,973	4,132	4,415	5,809	5,892	6,094	6,051	6,176	7,423
.. NATIONAL	1,881	2,026	2,334	2,427	2,349	3,471	3,605	3,796	3,823	3,972	4,504
.. IN OTHER EU STATES	1,015	1,080	1,120	1,028	1,135	1,485	1,335	1,462	1,418	1,228	1,788
.. IN THIRD COUNTRIES	549	480	519	677	932	853	952	836	811	976	1,131
FINAL USERS	942	923	1,297	1,103	1,338	1,932	2,406	2,441	3,297	3,273	3,221
.. NATIONAL	219	211	204	291	340	412	539	668	929	753	764
.. IN OTHER EU STATES	167	153	145	148	162	445	457	315	503	639	761
.. IN THIRD COUNTRIES	556	558	947	665	836	1,076	1,410	1,458	1,865	1,881	1,696
TOTAL	6,050	6,345	7,504	8,182	8,690	11,841	12,772	13,211	13,620	13,842	15,045
EU PUBLIC MARKET.....(1)	1,752	1,951	2,338	3,010	3,027	4,391	4,679	4,859	4,518	4,635	4,687
EU COMMERCIAL MARKET..(2)	3,193	3,357	3,699	3,830	3,896	5,521	5,731	6,059	6,427	6,349	7,531
EXPORTS.....(3)	1,105	1,037	1,466	1,342	1,768	1,929	2,362	2,293	2,675	2,858	2,827

(1) NATIONAL STATE + OTHER EU FINAL MILITARY USERS

(2) NATIONAL AND OTHER EU CIVIL AND MILITARY MANUFACTURERS AND FINAL CIVIL USERS

(3) MANUFACTURERS AND FINAL USERS OF THIRD COUNTRIES

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

BREAKDOWN OF EU OVERALL AEROSPACE TURNOVER

EQUIPMENT SECTOR (AS % OF GRAND TOTAL)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
NATIONAL STATE	6.5	6.5	7.4	9.0	8.3	10.3	10.7	10.2	8.6	8.2	8.1
.. R-D CONTRACTS	1.8	1.6	1.8	2.2	1.9	2.8	2.9	2.2	1.7	2.1	2.2
.. MAINTENANCE	1.0	0.9	0.9	1.2	1.3	1.6	1.6	1.5	1.6	1.7	1.9
.. PROCUREMENT	3.8	3.9	4.7	5.6	5.1	5.9	6.3	6.4	5.3	4.4	4.0
AEROSPACE MANUFACTURERS	13.6	12.6	13.2	12.7	12.4	14.6	14.1	13.2	12.1	11.5	13.7
.. NATIONAL	7.4	7.1	7.7	7.4	6.6	8.7	8.6	8.2	7.7	7.4	8.3
.. IN OTHER EU STATES	4.0	3.8	3.7	3.2	3.2	3.7	3.2	3.2	2.8	2.3	3.3
.. IN THIRD COUNTRIES	2.2	1.7	1.7	2.1	2.6	2.1	2.3	1.8	1.6	1.8	2.1
FINAL USERS	3.7	3.2	4.3	3.4	3.8	4.8	5.8	5.3	6.6	6.1	5.9
.. NATIONAL	0.9	0.7	0.7	0.9	1.0	1.0	1.3	1.5	1.9	1.4	1.4
.. IN OTHER EU STATES	0.7	0.5	0.5	0.5	0.5	1.1	1.1	0.7	1.0	1.2	1.4
.. IN THIRD COUNTRIES	2.2	2.0	3.1	2.0	2.4	2.7	3.4	3.2	3.7	3.5	3.1
TOTAL	23.8	22.3	24.9	25.1	24.5	29.7	30.6	28.7	27.3	25.8	27.8
EU PUBLIC MARKET.....(1)	6.9	6.9	7.7	9.2	8.5	11.0	11.2	10.6	9.0	8.6	8.7
EU COMMERCIAL MARKET..(2)	12.6	11.8	12.3	11.7	11.0	13.8	13.7	13.2	12.9	11.8	13.9
EXPORTS.....(3)	4.3	3.7	4.9	4.1	5.0	4.8	5.7	5.0	5.4	5.3	5.2

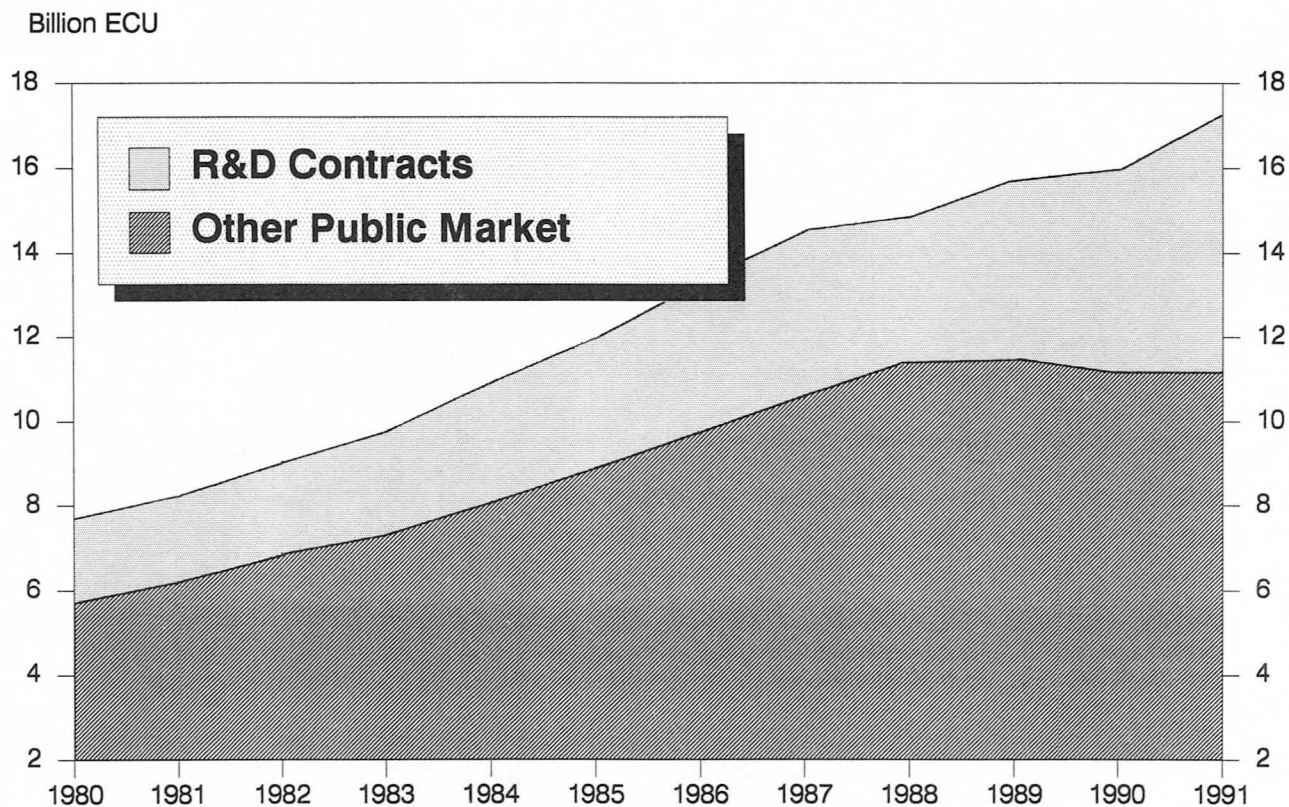
(1) NATIONAL STATE + OTHER EU FINAL MILITARY USERS

(2) NATIONAL AND OTHER EU CIVIL AND MILITARY MANUFACTURERS AND FINAL CIVIL USERS

(3) MANUFACTURERS AND FINAL USERS OF THIRD COUNTRIES

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

PUBLIC SUPPORT FOR THE EU AEROSPACE INDUSTRY



(*) Maintenance, sales & oth.EU final mil.users

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

PUBLIC SUPPORT FOR THE EU AND USA AEROSPACE INDUSTRY

BREAKDOWN BY CONTRACT TYPE (MIO ECU AT CURRENT PRICES)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
EU												
R-D CONTRACTS (AS % OF TOTAL)	1,993 26%	2,061 25%	2,153 24%	2,492 25%	2,879 26%	3,119 26%	3,560 27%	3,907 27%	3,445 23%	4,256 27%	4,793 30%	6,108 35%
OTHER PUBLIC MARKET (*) (AS % OF TOTAL)	5,715 74%	6,187 75%	6,875 76%	7,286 75%	8,062 74%	8,879 74%	9,764 73%	10,618 73%	11,412 77%	11,482 73%	11,155 70%	11,178 65%
TOTAL PUBLIC SUPPORT	7,707	8,247	9,029	9,777	10,941	11,998	13,324	14,525	14,857	15,738	15,949	17,286
(AS % OF FINAL TURNOVER AT NATIONAL LEVEL)	45%	39%	38%	38%	39%	39%	39%	41%	38%	37%	35%	37%
(AS % OF FINAL TURNOVER AT EU LEVEL)	52%	46%	45%	46%	47%	45%	46%	47%	44%	42%	39%	43%
USA												
R-D CONTRACTS (AS % OF TOTAL)	4,760 24%	7,639 26%	10,478 25%	12,802 25%	17,863 28%	21,730 28%	15,225 24%	16,042 28%	16,809 30%	17,821 29%	15,091 28%	-
OTHER PUBLIC MARKET (AS % OF TOTAL)	15,200 76%	21,923 74%	30,908 75%	38,495 75%	45,087 72%	54,587 72%	48,679 76%	41,670 72%	39,351 70%	44,227 71%	39,361 72%	-
TOTAL PUBLIC SUPPORT	19,961	29,562	41,386	51,296	62,951	76,316	63,904	57,712	56,161	62,048	54,452	-
(AS % OF TURNOVER)	59%	60%	69%	71%	75%	74%	74%	75%	73%	70%	64%	-

(*) MAINTENANCE, PROCUREMENT + OTHER EU FINAL MILITARY USERS

■ SOURCE: INDUSTRIAL ASSOCIATIONS (EU: DG III ANNUAL SURVEY - USA: A.I.A.A.)

PUBLIC FINANCING OF AEROSPACE R&D

FINAL BUDGETS - CURRENT PRICES (MIO ECUS)

AIRCRAFT	BE	DE	DK	ES	FR	HE	IR	IT	NL	PO	UK	EU
1982	-	-	-	0	-	-	-	-	-	0	154	-
1983	4	166	0	0	0	0	0	15	0	0	189	374
1984	-	184	-	-	-	0	0	39	0	0	194	-
1985	-	343	-	-	-	0	0	40	0	0	203	-
1986	-	288	-	-	-	0	0	48	0	0	197	-
1987	-	356	-	-	-	0	0	41	0	0	146	-
1988	-	346	-	-	-	0	0	78	0	0	154	-
1989	-	379	-	-	-	0	0	87	0	0	178	-
1990	-	432	-	-	-	0	0	86	0	0	118	-
1991	-	-	-	19	-	0	-	0	0	0	15	-

SPACE	BE	DE	DK	ES	FR	HE	IR	IT	NL	PO	UK	EU
1982	28	340	9	-	318	0	1	92	42	0	131	-
1983	30	338	11	0	395	0	1	123	41	0	127	1,066
1984	37	341	12	0	509	1	1	216	39	0	134	1,288
1985	43	369	14	30	560	1	2	260	42	0	143	1,463
1986	50	453	14	17	713	0	2	288	53	0	173	1,765
1987	66	532	15	57	725	0	3	438	50	0	184	2,071
1988	71	592	17	85	772	0	3	515	61	0	224	2,341
1989	83	645	18	112	919	0	3	505	54	0	221	2,561
1990	101	717	20	116	1,039	0	4	556	57	0	218	2,828
1991	106	-	22	162	1,149	0	-	492	62	1	235	-

TOTAL (A+S)	BE	DE	DK	ES	FR	HE	IR	IT	NL	PO	UK	EU
1982	-	-	-	-	-	-	-	-	-	0	284	-
1983	34	504	11	0	395	0	1	137	41	0	317	1,440
1984	-	524	-	-	-	1	1	255	39	0	328	-
1985	-	712	-	-	-	1	2	299	42	0	346	-
1986	-	741	-	-	-	0	2	336	53	0	371	-
1987	-	888	-	-	-	0	3	479	50	0	330	-
1988	-	938	-	-	-	0	3	593	61	0	379	-
1989	-	1,025	-	-	-	1	3	592	54	0	399	-
1990	-	1,148	-	-	-	0	4	642	57	0	336	-
1991	-	-	-	181	-	0	-	492	62	1	250	-

■ SOURCE: EUROSTAT (CRONOS: ZRD1)

PUBLIC FINANCING OF AEROSPACE R&D

AS % OF FINAL BUDGETS FOR TOTAL R&D EXPENDITURE

AIRCRAFT	BE	DE	DK	ES	FR	HE	IR	IT	NL	PO	UK	EU
1982	-	-	-	0.0	-	-	-	-	-	0.0	2.3	-
1983	0.7	2.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	2.8	1.4
1984	-	2.1	-	-	-	0.0	0.0	1.2	0.0	0.0	2.7	-
1985	-	3.6	-	-	-	0.0	0.0	1.1	0.0	0.0	2.6	-
1986	-	2.9	-	-	-	0.1	0.0	1.1	0.0	0.0	2.9	-
1987	-	3.3	-	-	-	0.0	0.0	0.8	0.0	0.0	2.2	-
1988	-	3.2	-	-	-	0.1	0.0	1.4	0.0	0.0	2.1	-
1989	-	3.3	-	-	-	0.1	0.0	1.5	0.0	0.0	2.5	-
1990	-	3.5	-	-	-	0.0	0.0	1.4	0.0	0.0	1.6	-
1991	-	-	-	0.8	-	0.0	-	0.0	0.0	0.0	0.2	-

SPACE	BE	DE	DK	ES	FR	HE	IR	IT	NL	PO	UK	EU
1982	5.4	4.2	3.4	-	4.3	0.3	1.5	4.1	3.0	0.0	2.0	-
1983	5.4	4.0	3.4	0.0	4.8	0.0	1.3	4.4	2.8	0.0	1.9	4.0
1984	6.2	3.9	3.3	0.0	5.6	0.5	1.6	6.4	2.6	0.0	1.8	4.4
1985	6.6	3.9	3.2	3.7	5.6	0.6	1.6	7.1	2.7	0.0	1.8	4.6
1986	7.7	4.5	2.7	2.1	7.0	0.3	1.9	6.5	3.1	0.0	2.6	5.5
1987	9.9	5.0	2.6	5.8	6.8	0.3	2.7	8.8	2.8	0.0	2.8	6.2
1988	10.6	5.5	2.3	6.8	6.7	0.3	3.0	9.0	3.3	0.1	3.1	6.5
1989	10.4	5.7	2.3	6.3	7.6	0.3	2.8	8.7	2.8	0.1	3.1	6.9
1990	12.3	5.9	2.5	5.4	8.0	0.3	2.7	8.7	2.8	0.1	3.0	7.1
1991	12.3	-	2.7	7.0	8.6	0.3	-	7.0	3.1	0.3	3.3	-

TOTAL (A+S)	BE	DE	DK	ES	FR	HE	IR	IT	NL	PO	UK	EU
1982	-	-	-	-	-	-	-	-	-	0.0	4.3	-
1983	6.1	6.0	3.4	0.0	4.8	0.0	1.3	4.9	2.8	0.0	4.6	5.4
1984	-	6.0	-	-	-	0.5	1.6	7.6	2.6	0.0	4.5	-
1985	-	7.5	-	-	-	0.6	1.6	8.2	2.7	0.0	4.4	-
1986	-	7.4	-	-	-	0.4	1.9	7.6	3.1	0.0	5.5	-
1987	-	8.3	-	-	-	0.3	2.7	9.7	2.8	0.0	5.0	-
1988	-	8.7	-	-	-	0.4	3.0	10.4	3.3	0.1	5.2	-
1989	-	9.0	-	-	-	0.4	2.8	10.2	2.8	0.1	5.5	-
1990	-	9.4	-	-	-	0.3	2.7	10.1	2.8	0.1	4.7	-
1991	-	-	-	7.8	-	0.3	-	7.0	3.1	0.3	3.5	-

■ SOURCE: EUROSTAT (CRONOS: ZRD1)

PUBLIC SUPPORT FOR THE EU AEROSPACE INDUSTRY

BREAKDOWN BY CONTRACT TYPE AND SUBSECTOR (MIO ECU AT CURRENT PRICES)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
AIRFRAMES AND MISSILES												
R-D CONTRACTS	1,093	1,133	1,137	1,312	1,590	1,653	1,953	2,031	1,694	2,418	2,345	2,657
OTH.NAT. - CIVIL	106	95	129	285	131	93	155	168	162	227	572	562
PUB.MARKET .. - MILITARY	2,500	2,468	2,548	2,651	2,807	3,855	3,706	4,162	4,377	4,404	4,464	4,777
OTH.EU FINAL MIL.USERS	673	761	964	782	726	584	352	351	432	941	661	788
TOTAL	4,371	4,457	4,779	5,030	5,254	6,186	6,166	6,712	6,665	7,990	8,042	8,784
SPACE												
R-D CONTRACTS	165	152	214	259	283	479	235	289	398	605	532	1,111
OTH.NAT. - CIVIL	51	85	108	177	186	185	159	174	292	371	484	229
PUB.MARKET .. - MILITARY	14	6	29	14	6	76	89	91	108	87	67	29
OTH.EU FINAL MIL.USERS	0	0	0	0	0	1	1	0	63	105	4	4
TOTAL	230	242	351	450	475	741	484	554	862	1,168	1,087	1,372
ENGINES												
R-D CONTRACTS	290	324	346	375	290	324	252	390	338	385	784	1,151
OTH.NAT. - CIVIL	72	56	45	28	31	24	111	240	270	372	36	23
PUB.MARKET .. - MILITARY	851	794	890	852	1,052	1,012	1,174	1,121	1,114	1,095	1,162	846
OTH.EU FINAL MIL.USERS	391	622	666	704	828	684	745	830	749	210	203	424
TOTAL	1,605	1,796	1,947	1,959	2,202	2,044	2,283	2,581	2,472	2,062	2,184	2,443
EQUIPMENT												
R-D CONTRACTS	444	451	456	546	716	663	1,120	1,197	1,015	849	1,133	1,189
OTH.NAT. - CIVIL	63	60	48	72	45	87	296	459	452	576	696	418
PUB.MARKET .. - MILITARY	927	1,152	1,333	1,617	2,186	2,187	2,683	2,817	3,210	2,847	2,564	2,793
OTH.EU FINAL MIL.USERS	68	89	114	104	64	90	291	205	182	246	243	286
TOTAL	1,502	1,752	1,951	2,338	3,010	3,027	4,391	4,679	4,859	4,518	4,635	4,687

■ INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

PUBLIC SUPPORT FOR THE EU AEROSPACE INDUSTRY

BREAKDOWN BY CONTRACT TYPE AND SUBSECTOR (AS % OF SUBSECTOR)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
AIRFRAMES AND MISSILES												
R-D CONTRACTS	25.0	25.4	23.8	26.1	30.3	26.7	31.7	30.3	25.4	30.3	29.2	30.2
OTH.NAT. - CIVIL	2.4	2.1	2.7	5.7	2.5	1.5	2.5	2.5	2.4	2.8	7.1	6.4
PUB.MARKET .. - MILITARY	57.2	55.4	53.3	52.7	53.4	62.3	60.1	62.0	65.7	55.1	55.5	54.4
OTH.EU FINAL MIL.USERS	15.4	17.1	20.2	15.5	13.8	9.4	5.7	5.2	6.5	11.8	8.2	9.0
AS % OF GRAND TOTAL	56.7	54.0	52.9	51.4	48.0	51.6	46.3	46.2	44.9	50.8	50.4	50.8
SPACE												
R-D CONTRACTS	71.8	62.6	61.0	57.6	59.6	64.6	48.5	52.2	46.2	51.8	48.9	81.0
OTH.NAT. - CIVIL	22.0	35.1	30.9	39.3	39.1	25.0	32.9	31.4	33.9	31.8	44.5	16.7
PUB.MARKET .. - MILITARY	6.1	2.3	8.1	3.2	1.3	10.3	18.5	16.4	12.6	7.4	6.2	2.1
OTH.EU FINAL MIL.USERS	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	7.3	9.0	0.4	0.3
AS % OF GRAND TOTAL	20.8	21.8	21.6	20.0	20.1	17.0	17.1	17.8	16.6	13.1	13.7	14.1
ENGINES												
R-D CONTRACTS	18.1	18.0	17.8	19.1	13.2	15.9	11.0	15.1	13.7	18.7	35.9	47.1
OTH.NAT. - CIVIL	4.5	3.1	2.3	1.4	1.4	1.2	4.9	9.3	10.9	18.1	1.6	0.9
PUB.MARKET .. - MILITARY	53.1	44.2	45.7	43.5	47.8	49.5	51.4	43.4	45.1	53.1	53.2	34.6
OTH.EU FINAL MIL.USERS	24.4	34.6	34.2	35.9	37.6	33.5	32.7	32.1	30.3	10.2	9.3	17.3
AS % OF GRAND TOTAL	19.5	21.2	21.6	23.9	27.5	25.2	33.0	32.2	32.7	28.7	29.1	27.1
EQUIPMENT												
R-D CONTRACTS	29.6	25.8	23.3	23.3	23.8	21.9	25.5	25.6	20.9	18.8	24.4	25.4
OTH.NAT. - CIVIL	4.2	3.4	2.5	3.1	1.5	2.9	6.8	9.8	9.3	12.8	15.0	8.9
PUB.MARKET .. - MILITARY	61.7	65.7	68.3	69.1	72.6	72.3	61.1	60.2	66.1	63.0	55.3	59.6
OTH.EU FINAL MIL.USERS	4.5	5.1	5.9	4.5	2.1	3.0	6.6	4.4	3.8	5.4	5.2	6.1
AS % OF GRAND TOTAL	3.0	2.9	3.9	4.6	4.3	6.2	3.6	3.8	5.8	7.4	6.8	7.9

■ INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

INTRA-EU CO-OPERATION LEVEL IN AEROSPACE INDUSTRY

Exports to other EU Aerospace Companies

As % of overall Turnover



■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

INTRA-EUROPEAN CO-OPERATION LEVEL IN AEROSPACE INDUSTRY

PROPORTION OF TURNOVER EXPORTED TO AEROSPACE COMPANIES (*) LOCATED IN OTHER EU MEMBER STATES

AS % OF OVERALL NON-CONSOLIDATED TURNOVER

	BE	DE	ES	FR	IT	NL	UK	EU
1980	17.1	24.7	13.1	7.6	21.8	1.5	8.2	11.6
1981	17.8	27.4	10.3	7.8	12.5	15.2	11.6	13.0
1982	17.1	26.2	5.6	6.9	11.2	15.9	13.7	13.4
1983	19.8	26.4	3.0	8.8	19.6	12.7	13.8	14.7
1984	27.6	26.7	5.2	7.5	21.2	9.5	11.9	13.7
1985	27.6	22.3	4.9	4.0	25.4	0.0	10.6	11.7
1986	32.3	17.1	4.6	5.3	25.5	0.1	11.1	11.9
1987	33.3	14.4	4.2	5.4	25.6	4.5	8.7	10.6
1988	24.8	15.9	4.1	7.8	25.9	2.5	10.1	12.0
1989	38.5	14.4	4.1	2.7	25.3	3.5	8.4	9.5
1990	44.0	15.6	6.0	4.0	25.1	3.5	9.3	10.6
1991	36.5	15.4	8.0	7.0	18.4	2.9	13.5	12.1
1992		13.2	7.8		19.3	2.4	8.7	

(*) CONSORTIA (AIRBUS, ATR,...) ARE CONSIDERED FINAL USERS, SO EXCLUDED

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

FINANCE: EU (*)

MIO ECUS AT CURRENT PRICES

	1983	1984	1985	1986	1987	1988	1989	1990	1991
TURNOVER	18157	25454	29272	30790	31508	36771	43028	48683	50056
VALUE ADDED	7860	10964	13075	13003	13041	14557	16106	18476	18877
WAGE COSTS	6279	8025	9828	10356	10630	11398	12275	14108	14921
TRADING INCOME	1580	2939	3247	2647	2411	3159	3831	4368	3956
NET INCOME	-139	471	638	716	339	1009	1197	829	282
EQUITY	4052	5210	6609	8070	8662	12171	13411	15890	16579
LONG AND MEDIUM TERM DEBT	4751	7459	9253	8798	8356	9473	10923	12068	12905
TOTAL PERMANENT LIABILITIES	8803	12669	15862	16868	17018	21645	24334	27957	29484
PERMANENT ASSETS	4011	6143	7420	8634	9791	13271	14918	18266	19507
R-D TOTAL	-	-	-	-	-	-	-	-	-
..... INDUSTRY-FUNDED	-	-	-	-	-	-	-	-	-
OPERATING INVESTMENTS	727	967	1562	-	1717	2136	2783	2925	2823
EMPLOYMENT	291173	332276	374430	386713	381766	415582	409432	446824	430542

RATIOS (AS % UNLESS STATED OTHERWISE)

	1983	1984	1985	1986	1987	1988	1989	1990	1991
LABOR PRODUCTIVITY									
- VALUE ADDED ON WAGE COSTS	125.2	136.6	133.0	125.6	122.7	127.7	131.2	131.0	126.5
- VAL.ADD./WORKER (000 ECUS)	27.0	33.0	34.9	33.6	34.2	35.0	39.3	41.4	43.8
R-D ON TURNOVER TOTAL	-	-	-	-	-	-	-	-	-
..... INDUSTRY-FUNDED	-	-	-	-	-	-	-	-	-
OPER. INVESTMENTS ON VAL.ADDED	9.3	8.8	11.9	-	13.2	14.7	17.3	15.8	15.0
LONG AND MEDIUM TERM DEBT ON PERMANENT LIABILITIES	54.0	58.9	58.3	52.2	49.1	43.8	44.9	43.2	43.8
TRADING INCOME ON VALUE ADDED	20.1	26.8	24.8	20.4	18.5	21.7	23.8	23.6	21.0
NET INCOME ON VALUE ADDED	-1.8	4.3	4.9	5.5	2.6	6.9	7.4	4.5	1.5
..... ON EQUITY	-3.4	9.0	9.7	8.9	3.9	8.3	8.9	5.2	1.7
..... ON ASSETS	-3.5	7.7	8.6	8.3	3.5	7.6	8.0	4.5	1.4

(*) FRANCE+GERMANY+ITALY+NETHERLANDS+SPAIN+UK (FOR YEARS AVAILABLE)

■ SOURCE : EUROSTAF/AEROSPATIALE

FINANCE: USA

MIO ECUS AT CURRENT PRICES

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993 I-VI
TURNOVER	112456	138714	113371	96147	95430	107377	104930	109083	103551	55816
VALUE ADDED	40321	45674	39184	35557	35791	39610	36548	37555	-	-
WAGE COSTS	30139	35058	30028	26947	27548	31010	27955	27898	-	-
TRADING INCOME	10181	10616	9156	8610	8243	8599	8593	9657	8738	5142
NET INCOME	4612	4290	3143	3969	4129	3509	3524	2005	-1414	2412
EQUITY	33736	38915	33422	27453	28642	33508	31330	32490	26546	30439
LONG AND MEDIUM TERM DEBT	11559	18168	16883	14433	15888	21124	22554	23245	28933	35158
TOTAL PERMANENT LIABILITIES	45295	57083	50305	41887	44530	54632	53884	55735	55480	65598
PERMANENT ASSETS	32963	45361	40491	33696	34524	43169	42689	44036	45135	54042
R-D TOTAL	23901	29132	21388	21187	21903	23271	19913	-	-	-
..... INDUSTRY-FUNDED	6038	7403	6163	5145	5093	5451	4822	-	-	-
OPERATING INVESTMENTS	4601	4600	3922	3119	2951	3785	3157	3268	3667	-
EMPLOYMENT	817000	898000	948000	968000	977000	992000	946000	879000	783000	732000

RATIOS (AS % UNLESS STATED OTHERWISE)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993 I-VI
LABOR PRODUCTIVITY										
- VALUE ADDED ON WAGE COSTS	133.8	130.3	130.5	131.9	129.9	127.7	130.7	134.6	-	-
- VAL.ADD./WORKER (000 ECUS)	49.4	50.9	41.3	36.7	36.6	39.9	38.6	42.7	-	-
R-D ON TURNOVER TOTAL	21.3	21.0	18.9	22.0	23.0	21.7	19.0	-	-	-
..... INDUSTRY-FUNDED	5.4	5.3	5.4	5.4	5.3	5.1	4.6	-	-	-
OPER. INVESTMENTS ON VAL.ADDED	11.4	10.1	10.0	8.8	8.2	9.6	8.6	8.7	-	-
LONG AND MEDIUM TERM DEBT ON PERMANENT LIABILITIES	25.5	31.8	33.6	34.5	35.7	38.7	41.9	41.7	52.2	53.6
TRADING INCOME ON VALUE ADDED	25.3	23.2	23.4	24.2	23.0	21.7	23.5	25.7	-	-
NET INCOME ON VALUE ADDED	11.4	9.4	8.0	11.2	11.5	8.9	9.6	5.3	-	-
..... ON EQUITY	13.7	11.0	9.4	14.5	14.4	10.5	11.2	6.2	-5.3	7.9
..... ON ASSETS	14.0	9.5	7.8	11.8	12.0	8.1	8.3	4.6	-3.1	4.5

■ SOURCE : AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA

FINANCE: FRANCE (*)

MIO ECUS AT CURRENT PRICES

	1983	1984	1985	1986	1987	1988	1989	1990	1991
TURNOVER	6575	13190	15124	15713	15078	16158	15158	16331	17502
VALUE ADDED	3016	5626	6690	6303	6128	5912	5977	6595	7233
WAGE COSTS	2140	3728	4818	5115	4888	4695	4406	5030	5411
TRADING INCOME	876	1898	1872	1187	1240	1217	1572	1565	1822
NET INCOME	-50	175	318	414	356	452	486	319	322
EQUITY	580	1218	1764	2905	3502	4586	4228	4959	5354
LONG AND MEDIUM TERM DEBT	1870	4583	6246	4991	4154	3822	3708	4747	5514
TOTAL PERMANENT LIABILITIES	2450	5801	8009	7895	7656	8408	7937	9706	10869
PERMANENT ASSETS	1337	3044	3906	4624	4664	5026	5110	6672	7268
R-D TOTAL	-	-	-	-	-	-	-	-	-
..... INDUSTRY-FUNDED	-	-	-	-	-	-	-	-	-
OPERATING INVESTMENTS	252	550	911	872	779	701	798	876	958
EMPLOYMENT	82108	130047	153291	153211	134381	123779	114013	124987	127234

RATIOS (AS % UNLESS STATED OTHERWISE)

	1983	1984	1985	1986	1987	1988	1989	1990	1991
LABOR PRODUCTIVITY									
- VALUE ADDED ON WAGE COSTS	140.9	150.9	138.8	123.2	125.4	125.9	135.7	131.1	133.7
- VAL.ADD./WORKER (000 ECUS)	36.7	43.3	43.6	41.1	45.6	47.8	52.4	52.8	56.8
R-D ON TURNOVER TOTAL	-	-	-	-	-	-	-	-	-
..... INDUSTRY-FUNDED	-	-	-	-	-	-	-	-	-
OPER. INVESTMENTS ON VAL.ADDED	8.3	9.8	13.6	13.8	12.7	11.9	13.4	13.3	13.2
LONG AND MEDIUM TERM DEBT ON PERMANENT LIABILITIES	76.3	79.0	78.0	63.2	54.3	45.5	46.7	48.9	50.7
TRADING INCOME ON VALUE ADDED	29.0	33.7	28.0	18.8	20.2	20.6	26.3	23.7	25.2
NET INCOME ON VALUE ADDED	-1.7	3.1	4.8	6.6	5.8	7.6	8.1	4.8	4.4
..... ON EQUITY	-8.6	14.3	18.1	14.3	10.2	9.9	11.5	6.4	6.0
..... ON ASSETS	-3.7	5.7	8.2	9.0	7.6	9.0	9.5	4.8	4.4

(*) AEROSPATIALE ('83 N.A.), DASSAULT, MATRA (TO '88), SNECMA ('83, '84 N.A.), THOMSON-CSF

■ SOURCE: EUROSTAF/AEROSPATIALE

FINANCE: GERMANY (*)

MIO ECUS AT CURRENT PRICES

	1983	1984	1985	1986	1987	1988	1989	1990	1991
TURNOVER	3594	3737	4205	4239	4351	5065	4959	6286	6337
VALUE ADDED	1690	1783	1949	2058	2051	2357	2127	2720	2945
WAGE COSTS	1359	1426	1539	1744	1926	2046	1927	2283	2462
TRADING INCOME	331	357	410	315	125	311	200	437	483
NET INCOME	52	60	79	-18	16	51	-16	-157	103
EQUITY	1115	1299	1403	1473	1399	1504	2053	3054	3441
LONG AND MEDIUM TERM DEBT	699	631	656	785	721	800	805	924	1018
TOTAL PERMANENT LIABILITIES	1814	1930	2059	2258	2121	2305	2857	3977	4459
PERMANENT ASSETS	885	978	1003	1119	1316	1499	1702	3044	3499
R-D TOTAL	-	-	1258	1177	1327	1394	1730	1911	1867
..... INDUSTRY-FUNDED	-	-	205	238	259	261	265	316	299
OPERATING INVESTMENTS	180	156	200	287	309	332	353	410	465
EMPLOYMENT	52117	51163	52558	54283	55538	55020	48498	55688	57157

RATIOS (AS % UNLESS STATED OTHERWISE)

	1983	1984	1985	1986	1987	1988	1989	1990	1991
LABOR PRODUCTIVITY									
- VALUE ADDED ON WAGE COSTS	124.4	125.0	126.6	118.0	106.5	115.2	110.4	119.1	119.6
- VAL.ADD./WORKER (000 ECUS)	32.4	34.8	37.1	37.9	36.9	42.8	43.8	48.8	51.5
R-D ON TURNOVER TOTAL	-	-	29.9	27.8	30.5	27.5	34.9	30.4	29.5
..... INDUSTRY-FUNDED	-	-	4.9	5.6	5.9	5.2	5.3	5.0	4.7
OPER. INVESTMENTS ON VAL.ADDED	10.6	8.7	10.3	14.0	15.1	14.1	16.6	15.1	15.8
LONG AND MEDIUM TERM DEBT ON PERMANENT LIABILITIES	38.5	32.7	31.8	34.8	34.0	34.7	28.2	23.2	22.8
TRADING INCOME ON VALUE ADDED	19.6	20.0	21.0	15.3	6.1	13.2	9.4	16.0	16.4
NET INCOME ON VALUE ADDED	3.1	3.3	4.0	-0.9	0.8	2.1	-0.8	-5.8	3.5
..... ON EQUITY	4.7	4.6	5.6	-1.2	1.1	3.4	-0.8	-5.2	3.0
..... ON ASSETS	5.9	6.1	7.9	-1.6	1.2	3.4	-1.0	-5.2	2.9

(*) DEUTSCHE AIRBUS (FROM '90), DORNIER, MBB (GMBH FROM '90), MTU

■ SOURCE: EUROSTAF/AEROSPATIALE

FINANCE: ITALY (*)

MIO ECUS AT CURRENT PRICES

	1983	1984	1985	1986	1987	1988	1989	1990	1991
TURNOVER	642	843	1318	2082	2067	2140	2578	3435	3139
VALUE ADDED	329	357	625	971	1001	1075	1310	1734	1307
WAGE COSTS	204	220	403	569	653	707	824	1204	1109
TRADING INCOME	125	137	222	402	347	368	486	530	197
NET INCOME	4	12	29	39	56	70	65	39	37
EQUITY	268	289	489	805	895	900	1022	1485	1144
LONG AND MEDIUM TERM DEBT	602	553	703	1314	1264	1563	1772	1961	1500
TOTAL PERMANENT LIABILITIES	870	842	1192	2119	2159	2463	2794	3446	2644
PERMANENT ASSETS	340	321	466	911	944	1250	1380	1498	1317
R-D TOTAL	189	282	359	605	654	623	648	776	595
..... INDUSTRY-FUNDED	-	-	-	-	-	-	-	-	-
OPERATING INVESTMENTS	94	24	69	-	131	151	166	468	276
EMPLOYMENT	12286	12321	19632	29610	30223	30781	31384	39643	30099

RATIOS (AS % UNLESS STATED OTHERWISE)

	1983	1984	1985	1986	1987	1988	1989	1990	1991
LABOR PRODUCTIVITY									
- VALUE ADDED ON WAGE COSTS	161.2	162.1	155.2	170.6	153.2	152.1	158.9	144.1	117.8
- VAL.ADD./WORKER (000 ECUS)	26.8	28.9	31.8	32.8	33.1	34.9	41.7	43.7	43.4
R-D ON TURNOVER TOTAL	29.4	33.5	27.3	29.1	31.6	29.1	25.1	22.6	19.0
..... INDUSTRY-FUNDED	-	-	-	-	-	-	-	-	-
OPER. INVESTMENTS ON VAL.ADDED	28.5	6.7	11.0	-	13.1	14.0	12.7	27.0	21.1
LONG AND MEDIUM TERM DEBT ON PERMANENT LIABILITIES	69.2	65.7	59.0	62.0	58.5	63.5	63.4	56.9	56.7
TRADING INCOME ON VALUE ADDED	38.0	38.3	35.6	41.4	34.7	34.3	37.1	30.6	15.1
NET INCOME ON VALUE ADDED	1.2	3.5	4.7	4.0	5.6	6.5	5.0	2.2	2.8
..... ON EQUITY	1.5	4.3	6.0	4.9	6.3	7.8	6.4	2.6	3.2
..... ON ASSETS	1.2	3.8	6.3	4.3	6.0	5.6	4.7	2.6	2.8

(*) AERITALIA (TO '89), AGUSTA (FROM '86 TO '90), ALENIA (FROM '90), SELENIA (FROM '85 TO '89)

■ SOURCE: EUROSTAF/AEROSPATIALE

FINANCE: NETHERLANDS (*)

MIO ECUS AT CURRENT PRICES

	1983	1984	1985	1986	1987	1988	1989	1990	1991
TURNOVER	604	619	533	584	452	880	1199	1385	1650
VALUE ADDED	215	209	258	300	269	368	396	459	509
WAGE COSTS	183	186	228	277	291	299	319	364	383
TRADING INCOME	33	23	30	22	-22	69	77	96	126
NET INCOME	7	9	13	8	-46	6	18	36	38
EQUITY	54	68	104	117	121	365	376	414	431
LONG AND MEDIUM TERM DEBT	196	229	230	245	676	637	771	908	938
TOTAL PERMANENT LIABILITIES	251	297	334	361	796	1002	1147	1322	1368
PERMANENT ASSETS	106	115	147	168	584	589	607	632	622
R-D TOTAL	36	100	159	153	98	39	23	26	28
..... INDUSTRY-FUNDED	15	15	30	40	75	12	10	13	16
OPERATING INVESTMENTS	10	19	36	27	39	24	42	77	57
EMPLOYMENT	8398	9055	10053	10860	11709	11690	12925	13561	12874

RATIOS (AS % UNLESS STATED OTHERWISE)

	1983	1984	1985	1986	1987	1988	1989	1990	1991
LABOR PRODUCTIVITY									
- VALUE ADDED ON WAGE COSTS	117.9	112.4	113.2	108.0	92.6	123.1	124.0	126.4	132.9
- VAL.ADD./WORKER (000 ECUS)	25.7	23.1	25.7	27.6	23.0	31.5	30.6	33.9	39.5
R-D ON TURNOVER TOTAL	6.0	16.2	29.9	26.2	21.7	4.4	1.9	1.9	1.7
..... INDUSTRY-FUNDED	2.5	2.5	5.6	6.9	16.7	1.4	0.8	0.9	1.0
OPER. INVESTMENTS ON VAL. ADDED	4.7	8.9	14.1	9.1	14.6	6.6	10.7	16.9	11.2
LONG AND MEDIUM TERM DEBT ON PERMANENT LIABILITIES	78.3	77.0	68.8	67.6	84.8	63.6	67.2	68.7	68.5
TRADING INCOME ON VALUE ADDED	15.2	11.0	11.6	7.4	-8.0	18.8	19.4	20.9	24.8
NET INCOME ON VALUE ADDED	3.3	4.5	5.1	2.6	-17.0	1.5	4.6	7.9	7.4
..... ON EQUITY	13.2	13.7	12.6	6.8	-37.9	1.6	4.8	8.7	8.8
..... ON ASSETS	6.7	8.1	9.0	4.7	-7.9	1.0	3.0	5.7	6.1

(*) FOKKER

■ SOURCE : EUROSTAF/AEROSPATIALE

FINANCE: SPAIN (*)

MIO ECUS AT CURRENT PRICES

	1985	1986	1987	1988	1989	1990	1991
TURNOVER	355	305	313	532	601	764	681
VALUE ADDED	247	220	205	310	359	412	400
WAGE COSTS	184	207	214	261	292	306	322
TRADING INCOME	62	13	-9	49	67	106	78
NET INCOME	13	-63	-97	-46	-29	-23	-54
EQUITY	89	30	-68	-14	13	66	67
LONG AND MEDIUM TERM DEBT	206	312	285	537	578	717	741
TOTAL PERMANENT LIABILITIES	295	342	216	524	591	783	808
PERMANENT ASSETS	135	174	195	256	504	662	626
R-D TOTAL	-	-	-	-	-	-	-
..... INDUSTRY-FUNDED	15	15	15	18	20	17	28
OPERATING INVESTMENTS	46	47	50	62	74	45	55
EMPLOYMENT	10238	10591	10777	10652	10138	9544	9338

RATIOS (AS % UNLESS STATED OTHERWISE)

	1985	1986	1987	1988	1989	1990	1991
LABOR PRODUCTIVITY							
- VALUE ADDED ON WAGE COSTS	133.8	106.5	95.7	118.9	122.9	134.8	124.2
- VAL.ADD./WORKER (000 ECUS)	24.1	20.8	19.0	29.1	35.4	43.2	42.9
R-D ON TURNOVER TOTAL	-	-	-	-	-	-	-
..... INDUSTRY-FUNDED	4.2	4.8	4.7	3.4	3.4	2.2	4.1
OPER. INVESTMENTS ON VAL.ADDED	18.5	21.6	24.3	19.9	20.6	11.0	13.8
LONG AND MEDIUM TERM DEBT ON PERMANENT LIABILITIES	69.8	91.3	131.5	102.6	97.8	91.6	91.7
TRADING INCOME ON VALUE ADDED	25.2	6.1	-4.5	15.9	18.6	25.8	19.5
NET INCOME ON VALUE ADDED	5.1	-28.8	-47.4	-14.7	-8.1	-5.5	-13.6
..... ON EQUITY	14.2	-212.2	142.4	331.6	-221.3	-34.2	-81.2
..... ON ASSETS	9.4	-36.5	-49.9	-17.8	-5.8	-3.4	-8.7

(*) CASA (FROM '85)

■ SOURCE : EUROSTAF/AEROSPATIALE

FINANCE: UNITED KINGDOM (*)

MIO ECUS AT CURRENT PRICES

	1983	1984	1985	1986	1987	1988	1989	1990	1991
TURNOVER	6741	7066	7737	7868	9248	11995	18534	20482	20748
VALUE ADDED	2609	2990	3307	3152	3387	4534	5938	6555	6483
WAGE COSTS	2393	2466	2655	2444	2658	3390	4507	4921	5233
TRADING INCOME	216	525	651	708	730	1144	1430	1634	1250
NET INCOME	-153	215	186	336	54	476	673	615	-163
EQUITY	2035	2336	2760	2741	2812	4830	5719	5913	6142
LONG AND MEDIUM TERM DEBT	1384	1463	1213	1152	1258	2113	3288	2810	3195
TOTAL PERMANENT LIABILITIES	3419	3799	3973	3893	4070	6943	9008	8723	9337
PERMANENT ASSETS	1342	1685	1764	1637	2089	4651	5616	5758	6174
R-D TOTAL	-	-	-	1217	1198	1464	1665	1679	1613
..... INDUSTRY-FUNDED	394	367	377	369	439	385	523	661	557
OPERATING INVESTMENTS	192	219	300	291	408	866	1350	1049	1012
EMPLOYMENT	136264	129690	128658	128158	139138	183660	192474	203401	193840

RATIOS (AS % UNLESS STATED OTHERWISE)

	1983	1984	1985	1986	1987	1988	1989	1990	1991
LABOR PRODUCTIVITY									
- VALUE ADDED ON WAGE COSTS	109.0	121.3	124.5	129.0	127.5	133.8	131.7	133.2	123.9
- VAL.ADD./WORKER (000 ECUS)	19.1	23.1	25.7	24.6	24.3	24.7	30.8	32.2	33.4
R-D ON TURNOVER TOTAL	-	-	-	15.5	13.0	12.2	9.0	8.2	7.8
..... INDUSTRY-FUNDED	5.8	5.2	4.9	4.7	4.8	3.2	2.8	3.2	2.7
OPER. INVESTMENTS ON VAL. ADDED	7.4	7.3	9.1	9.2	12.1	19.1	22.7	16.0	15.6
LONG AND MEDIUM TERM DEBT ON PERMANENT LIABILITIES	40.5	38.5	30.5	29.6	30.9	30.4	36.5	32.2	34.2
TRADING INCOME ON VALUE ADDED	8.3	17.5	19.7	22.5	21.5	25.2	24.1	24.9	19.3
NET INCOME ON VALUE ADDED	-5.9	7.2	5.6	10.7	1.6	10.5	11.3	9.4	-2.5
..... ON EQUITY	-7.5	9.2	6.7	12.3	1.9	9.9	11.8	10.4	-2.6
..... ON ASSETS	-11.4	12.7	10.5	20.5	2.6	10.2	12.0	10.7	-2.6

(*) BAE, ROLLS-ROYCE, WESTLAND

■ SOURCE: EUROSTAF/AEROSPATIALE

EMPLOYMENT



CHAPTER 7

EMPLOYMENT

The **annual survey**, conducted by DG III together with the industrial associations of 7 EU Member States - A.I.A. (It), A.T.E.C.M.A. (Es), B.D.L.I. (De), G.E.B.E.C.O.M.A. (Be), G.I.F.A.S. (Fr), N.A.I. (Nl) and S.B.A.C. (UK) -, enables the *employment* in the European aerospace industry to be broken down by *professional categories* and by *activities*. Participants to this survey are the aerospace companies whose turnover concerns (partly or entirely) one or more of the 3 groups of aerospace products listed in the introductory comments of Chapter 6 (complete aircraft / space systems, propulsion devices, equipment).

Revisions or retrospective corrections of historical series can occur. Such is notably the case for France, where a conceptual error in the breakdown by sector in the 1993 issue has been mended. Data for Spain relating to the years 1984-86 have been estimated by linear regression to the employment of the major Spanish aerospace company, Casa.

The *professional categories* are the following:

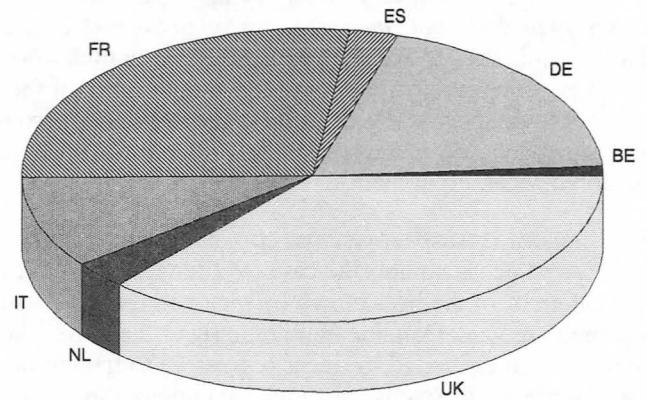
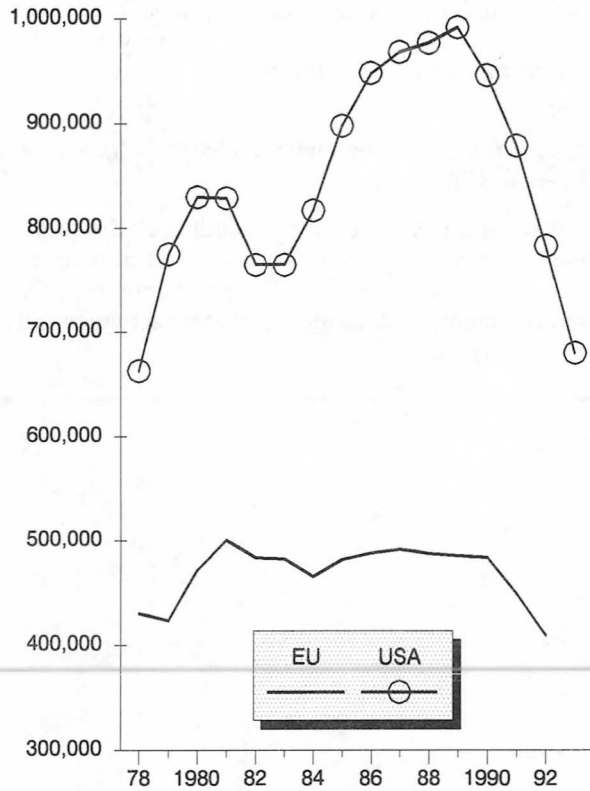
- *engineers and managers*,
- *technical employees* comprise technicians, draughtsmen, craftsmen, supervisors, foremen, etc.
- *administrative employees* comprise clerical and office staff, etc.
- *production workers* (skilled and unskilled)

The professional categories indicated correspond to the actual functions carried out, and do not necessarily correspond to the formal qualifications possessed.

The *activities* considered concern:

- *R&D*,
- *production*, including maintenance, repairs and post-delivery modifications,
- *marketing and management*, including all the activities involved in running the company (general management, general accounting, financial management, personnel management, etc.) besides marketing activities and after-sales services.

EU and USA Aerospace Employment



EU Breakdown by Country
1992

TOTAL AEROSPACE EMPLOYMENT

AT YEAR-END

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
BELGIUM	4,700	4,849	4,941	4,380	4,422	4,025	5,015	4,895	5,068	6,272	7,032	6,886
FRANCE	103,364	108,646	108,525	105,432	106,769	108,915	107,454	103,295	103,424	106,297	110,783	113,690
GERMANY	57,253	56,678	52,455	52,985	51,555	51,914	51,367	52,416	56,348	60,866	66,086	68,650
ITALY	28,000	28,500	30,000	30,000	30,240	30,768	31,991	34,260	36,136	38,370	40,934	41,920
NETHERLANDS	8,000	8,000	6,600	7,000	6,555	7,682	7,865	7,320	7,382	7,935	8,862	9,706
SPAIN	-	-	-	-	-	-	-	-	6,642	7,331	8,177	9,516
UNITED KINGDOM	235,100	217,800	207,500	201,700	210,100	233,792	227,402	219,251	214,918	196,566	229,821	249,863
TOTAL EU	436,417	424,473	410,021	401,497	409,641	437,096	431,094	421,437	429,918	423,637	471,695	500,231

USA (*)	732,000	633,000	646,000	659,000	666,000	633,000	615,000	612,000	663,000	775,000	830,000	829,000
CANADA	36,000	28,000	28,800	31,700	28,400	27,300	25,300	28,900	33,800	37,700	46,800	44,800
JAPAN	-	-	-	-	29,814	31,352	29,918	28,674	30,097	31,666	32,991	33,772

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993 E
BELGIUM	6,705	6,127	5,757	5,470	5,743	5,510	4,829	5,239	5,234	4,829	4,243	4,118
FRANCE	115,982	127,269	127,815	127,072	126,056	122,317	119,484	120,334	120,720	118,300	111,600	103,500
GERMANY	66,883	65,677	65,366	77,256	85,021	86,573	93,561	94,456	95,042	86,299	78,501	71,000
ITALY	42,907	42,546	42,885	43,284	44,780	47,000	49,500	50,501	50,698	47,000	42,000	37,000
NETHERLANDS	9,527	8,398	9,055	10,053	10,860	11,529	11,584	12,718	13,314	12,606	12,363	12,600
SPAIN	10,216	10,538	11,440	11,836	12,020	11,304	11,770	12,581	12,627	12,362	11,067	10,914
UNITED KINGDOM	230,961	221,998	203,202	206,677	203,489	207,161	196,682	189,911	186,337	167,614	149,725	-
TOTAL EU	483,181	482,553	465,520	481,648	487,969	491,394	487,410	485,740	483,972	449,010	409,499	-

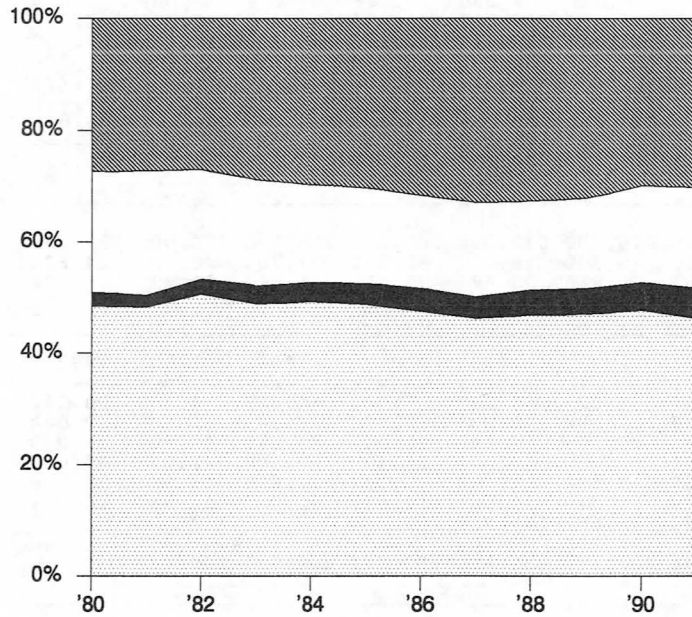
USA (*)	765,000	765,000	817,000	898,000	948,000	968,000	977,000	992,000	946,000	879,000	783,000	680,000
CANADA	39,800	37,100	42,300	47,627	53,678	57,804	63,650	63,632	63,962	61,717	59,172	58,715
JAPAN	35,033	32,879	34,216	34,313	35,286	36,560	37,488	38,329	39,131	40,221	-	-

(*) OTHER INDUSTRIES WITH EMPLOYMENT RELATED TO AEROSPACE EXCLUDED

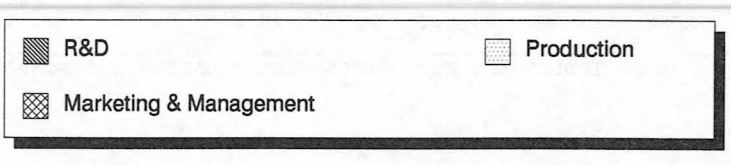
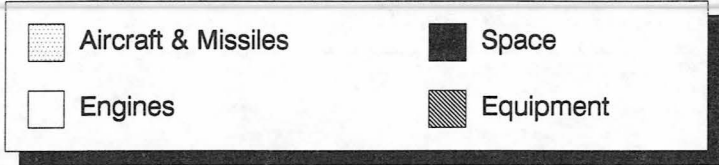
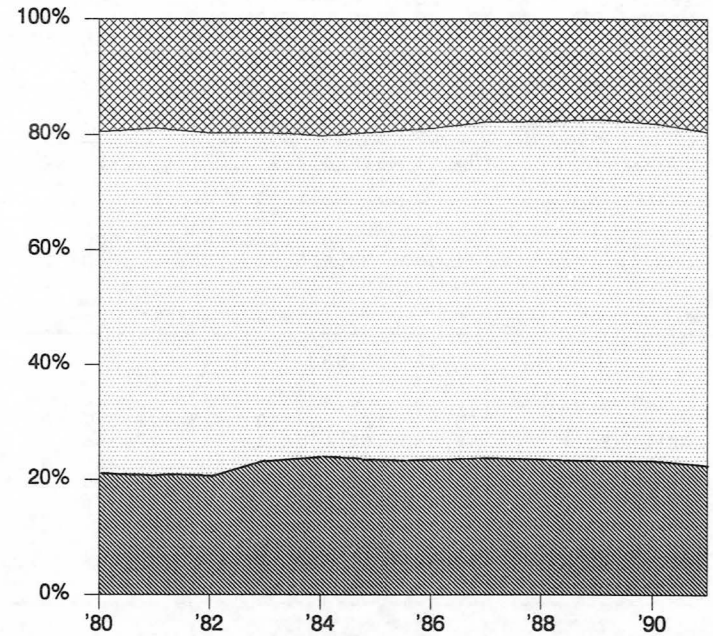
■ SOURCE: INDUSTRIAL ASSOCIATIONS (EU: DG III ANNUAL SURVEY - USA: A.I.A.A. - CANADA: A.I.A.C. - JAPAN: S.J.A.C.)

EU AEROSPACE EMPLOYMENT BREAKDOWN

Breakdown by Sector



Breakdown by Activity



■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

EU : BREAKDOWN OF WORKFORCE (AT YEAR-END)

BY SECTOR AND BY MEMBER STATE

AIRFRAMES AND MISSILES

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
BELGIUM	3,755	3,461	3,329	2,919	2,757	2,577	2,714	2,680	2,611	2,847	2,806	2,608
FRANCE	60,058	61,068	61,382	60,301	60,525	59,954	57,630	55,613	54,317	54,466	53,160	52,270
GERMANY	40,901	42,472	40,501	38,722	39,411	41,694	44,934	40,698	43,824	45,237	48,598	37,769
ITALY	26,534	26,930	28,183	28,255	27,850	26,280	27,087	27,965	27,918	29,543	29,152	27,965
NETHERLANDS	6,375	6,982	6,852	6,039	6,511	7,229	7,809	8,439	8,789	9,717	10,243	9,319
SPAIN	7,290	8,553	9,233	9,535	10,079	10,301	10,331	9,808	9,601	10,469	10,654	9,864
UNITED KINGDOM	83,907	92,310	94,953	90,015	81,844	86,799	81,463	82,249	81,170	76,088	76,318	67,886
TOTAL EU	228,820	241,776	244,433	235,786	228,977	234,834	231,968	227,452	228,230	228,367	230,931	207,681

SPACE

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
BELGIUM	245	299	364	410	380	434	571	555	344	549	590	468
FRANCE	2,681	3,161	4,454	4,696	6,006	6,695	8,496	6,189	8,534	9,080	9,720	10,170
GERMANY	2,766	2,681	3,727	4,432	5,067	5,447	5,553	5,896	6,304	6,474	7,006	6,956
ITALY	870	811	914	1,283	1,420	2,280	2,964	3,243	3,614	3,535	3,650	3,619
NETHERLANDS	209	229	226	201	217	241	260	240	269	322	350	360
SPAIN	146	156	140	156	229	268	303	358	371	351	532	640
UNITED KINGDOM	4,417	3,168	3,437	4,107	2,967	2,600	2,500	2,358	2,747	1,978	2,309	2,150
TOTAL EU	11,334	10,505	13,262	15,285	16,286	17,965	20,647	18,839	22,183	22,289	24,157	24,363

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

EU : BREAKDOWN OF WORKFORCE (AT YEAR-END)

BY SECTOR AND BY MEMBER STATE

ENGINES

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
BELGIUM	2,262	2,398	2,357	2,238	2,107	2,053	2,053	1,878	1,611	1,555	1,590	1,501
FRANCE	22,570	23,360	24,030	24,424	24,927	25,100	25,270	25,454	24,059	24,125	24,880	24,220
GERMANY	8,701	8,955	8,697	7,717	8,434	8,096	8,790	9,481	9,824	9,802	10,926	10,072
ITALY	6,037	6,292	5,984	5,803	5,645	6,475	6,086	6,392	6,830	6,868	6,945	7,332
NETHERLANDS	0	0	0	0	0	0	0	0	0	0	0	0
SPAIN	226	240	259	261	396	466	530	528	663	720	395	913
UNITED KINGDOM	62,986	70,942	53,671	51,264	40,630	40,701	38,591	39,924	34,765	36,004	39,523	37,083
TOTAL EU	102,782	112,187	94,998	91,707	82,139	82,891	81,320	83,657	77,752	79,074	84,259	81,121

EQUIPMENT

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
BELGIUM	770	728	655	560	513	406	405	397	263	288	248	252
FRANCE	25,474	26,101	26,116	37,848	36,357	35,323	34,659	35,061	32,574	32,663	32,960	31,640
GERMANY	13,718	14,542	13,958	14,806	12,454	22,019	25,744	30,498	33,609	32,943	28,512	31,502
ITALY	7,493	7,887	7,826	7,205	7,970	8,249	8,643	9,400	11,138	10,555	10,951	8,084
NETHERLANDS	2,278	2,495	2,449	2,158	2,327	2,583	2,791	2,850	2,526	2,679	2,721	2,927
SPAIN	515	567	584	586	736	802	856	610	1,135	1,041	1,046	945
UNITED KINGDOM	78,511	83,443	78,900	76,612	77,761	76,577	80,935	82,630	78,000	75,841	68,187	60,495
TOTAL EU	128,759	135,763	130,488	139,775	138,118	145,959	154,033	161,446	159,245	156,010	144,625	135,845

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

EU : BREAKDOWN OF WORKFORCE (AT YEAR-END)**BY SECTOR AND BY PROFESSIONAL CATEGORY/ACTIVITY****AIRFRAMES AND MISSILES**

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
ENGINEERS AND MANAGERS	36,646	38,868	39,309	39,854	39,978	39,935	39,567	37,980	41,302	36,741
TECHNICAL STAFF	61,111	60,540	59,508	57,809	62,187	59,146	62,822	64,520	63,435	59,141
ADMINISTRATIVE STAFF	37,296	34,960	34,752	37,054	34,788	34,727	34,857	35,312	35,195	32,987
PRODUCTION WORKERS	109,455	101,484	95,408	100,118	95,131	93,587	90,986	90,555	90,999	78,812

R-D	47,205	51,384	51,963	48,623	48,615	51,641	51,061	49,842	50,340	41,992
PRODUCTION	149,401	137,410	130,321	140,323	137,708	135,117	136,859	139,309	139,581	126,174
MARKETING AND MANAGEMENT	47,827	46,992	46,693	45,888	45,645	40,694	40,310	39,216	41,010	39,515

SPACE

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
ENGINEERS AND MANAGERS	3,682	4,268	4,296	4,902	5,934	5,770	7,503	7,726	8,692	8,770
TECHNICAL STAFF	3,945	5,238	5,277	6,498	8,281	7,591	8,507	7,385	7,669	7,971
ADMINISTRATIVE STAFF	2,119	2,282	2,506	2,974	2,405	2,423	2,852	2,745	2,876	3,081
PRODUCTION WORKERS	3,516	3,497	4,206	3,589	4,026	3,054	3,321	4,433	4,920	4,541

R-D	7,586	8,810	7,776	9,824	11,095	9,730	11,019	10,761	11,558	12,008
PRODUCTION	3,695	4,077	5,876	4,911	6,140	5,510	6,734	8,120	8,548	8,488
MARKETING AND MANAGEMENT	1,981	2,398	2,634	3,228	3,412	3,599	4,430	3,408	4,051	3,867

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

EU : BREAKDOWN OF WORKFORCE (AT YEAR-END)**BY SECTOR AND BY PROFESSIONAL CATEGORY/ACTIVITY****ENGINES**

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
ENGINEERS AND MANAGERS	15,480	15,211	13,947	14,271	13,703	12,976	11,756	12,181	11,673	10,682
TECHNICAL STAFF	19,099	21,294	19,240	18,109	18,504	24,595	22,429	23,946	23,994	23,588
ADMINISTRATIVE STAFF	11,340	10,979	9,749	10,518	9,776	10,900	10,279	9,399	8,673	9,333
PRODUCTION WORKERS	49,122	44,225	39,202	39,993	39,345	35,189	33,288	33,548	39,919	37,518

R-D	15,959	17,091	15,845	15,660	15,324	16,510	15,496	15,918	17,615	17,127
PRODUCTION	58,383	54,475	48,828	49,823	49,607	51,814	47,809	48,351	52,026	47,802
MARKETING AND MANAGEMENT	20,656	20,141	17,466	17,408	16,390	15,332	14,447	14,805	14,618	16,192

EQUIPMENT

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
ENGINEERS AND MANAGERS	23,551	26,873	27,991	30,954	35,673	34,762	29,674	30,359	28,798	25,560
TECHNICAL STAFF	28,297	33,694	32,721	36,128	34,828	37,556	38,591	38,797	35,872	32,138
ADMINISTRATIVE STAFF	20,574	22,353	23,349	24,003	23,539	27,091	26,298	25,340	21,041	21,572
PRODUCTION WORKERS	57,949	56,785	54,058	54,875	59,871	62,090	64,682	61,514	58,913	56,576

R-D	28,628	34,656	36,766	39,192	39,702	39,335	36,728	35,948	33,613	30,125
PRODUCTION	77,089	79,553	74,308	79,482	87,494	94,007	94,957	92,820	83,524	77,524
MARKETING AND MANAGEMENT	24,771	25,566	27,043	27,285	26,837	28,104	27,560	27,242	27,488	28,195

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

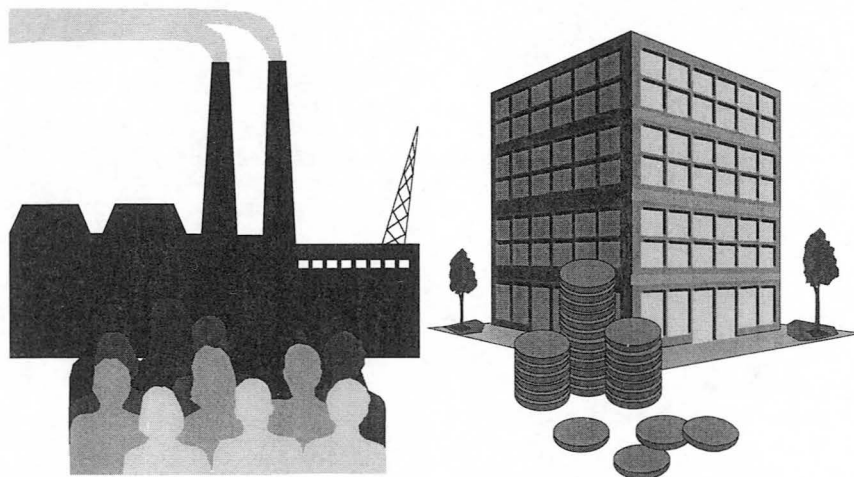
EU : BREAKDOWN OF WORKFORCE (AT YEAR-END)**BY SECTOR AND BY PROFESSIONAL CATEGORY/ACTIVITY****TOTAL**

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
ENGINEERS AND MANAGERS	79,358	85,221	85,543	89,981	95,288	93,444	88,500	88,246	90,465	81,752
TECHNICAL STAFF	112,452	120,766	116,746	118,544	123,801	128,889	132,348	134,649	130,971	122,837
ADMINISTRATIVE STAFF	71,329	70,575	70,356	74,549	70,508	75,141	74,287	72,795	67,784	66,974
PRODUCTION WORKERS	220,042	205,991	192,874	198,574	198,373	193,920	192,276	190,050	194,751	177,447

R-D	99,378	111,941	112,350	113,299	114,737	117,217	114,304	112,469	113,126	101,252
PRODUCTION	288,568	275,515	259,334	274,540	280,949	286,448	286,359	288,600	283,680	259,988
MARKETING AND MANAGEMENT	95,235	95,097	93,836	93,809	92,284	87,729	86,747	84,671	87,167	87,769

■ SOURCE: INDUSTRIAL ASSOCIATIONS (DG III ANNUAL SURVEY WITH AIA, ATECMA, BDLI, GEBECOMA, GIFAS, NAI, SBAC)

MAJOR AEROSPACE MANUFACTURERS



CHAPTER 8

MAJOR AEROSPACE MANUFACTURERS

Data for the *turnover* and *employment* of the major world *aerospace manufacturers* are basically the result of an annual survey, carried out by DG III with the companies, completed if necessary with elements published in their annual reports and press information.

Unless stated otherwise, the data relating to diversified groups should cover their **aerospace activities only**.

The turnover/employment ratio is not the best way of measuring productivity, since it overestimates the position of manufacturers that undertake little R&D activity and/or carry out more work under license or under sub-contracts.

TURNOVER OF MAJOR AEROSPACE MANUFACTURERS (MIO ECU AT CURRENT VALUES)

	1985	1986	1987	1988	1989	1990	1991	1992	1993 E	1994 F
(US) BOEING	18,253	17,017	13,698	14,664	18,719	21,670	23,656	23,252	21,793	18,258
(US) MC DONNELL DOUGLAS	14,285	12,305	11,010	11,915	12,919	12,489	14,584	13,383	12,441	-
(DE) DASA	4,060	4,010	4,312	5,175	7,550	8,201	8,182	8,551	9,029	9,629
(US) UNITED TECHNOLOGIES	10,626	8,521	7,784	8,332	9,837	8,898	8,993	8,415	8,408	-
(US) LOCKHEED	12,204	10,242	9,722	8,956	8,978	7,820	7,916	7,781	11,240	-
(UK) BRITISH AEROSPACE	4,496	4,671	5,784	6,135	7,631	8,653	8,472	7,636	-	-
(US) GM HUGHES	-	7,068	6,066	6,267	6,750	6,141	6,223	6,823	7,722	-
(FR) AEROSPATIALE	3,620	3,737	3,592	3,977	4,509	4,741	5,478	6,001	5,832	-
(US) GENERAL ELECTRIC	10,218	10,460	10,425	9,999	11,024	10,344	10,672	5,676	6,006	-
(US) MARTIN MARIETTA	4,989	4,198	3,896	4,156	4,779	4,575	4,643	4,584	7,894	-
(US) NORTHROP	6,627	5,698	5,243	4,902	4,764	4,311	4,595	4,275	4,376	-
(US) ALLIED-SIGNAL AEROSPACE	4,708	4,556	4,113	4,014	4,610	4,208	4,252	3,803	-	-
(IT) ALENIA	1,804	2,028	2,117	2,272	2,822	2,743	3,139	3,208	2,656	-
(UK) ROLLS-ROYCE	2,228	2,229	2,516	2,531	3,051	3,278	2,900	2,905	2,765	2,835
(JA) MITSUBISHI HEAVY IND.	1,738	1,648	1,878	1,924	2,039	2,030	2,385	2,821	3,040	3,033
(US) TEXTRON	3,591	3,614	3,358	3,051	3,069	2,857	2,763	2,806	-	-
(US) GRUMMAN	4,061	3,558	2,924	3,086	3,230	3,133	3,198	2,690	2,789	-
(US) ROCKWELL	6,957	5,634	4,394	3,358	3,548	2,969	2,853	2,441	2,488	-
(US) TRW	4,383	3,453	2,691	2,690	2,891	2,600	2,510	2,259	-	-
(FR) DASSAULT AVIATION	2,419	2,294	2,243	2,510	2,471	2,476	2,058	2,112	1,653	1,636
(FR) SNECMA	1,384	1,508	1,350	1,458	1,915	2,044	2,076	1,977	1,834	-
(NL) FOKKER AIRCRAFT B.V.	533	584	452	880	1,199	1,385	1,650	1,795	-	-
(EU) EUROCOPTER INT'L	-	-	-	-	-	-	1,807	1,694	1,535	1,368
(FR) MATRA	840	830	929	965	1,014	1,490	1,536	1,609	-	-
(US) LITTON INDUSTRIES	2,467	2,128	1,948	1,995	2,251	1,699	1,587	1,507	1,544	-
(CA) BOMBARDIER AEROSPACE	-	210	363	433	644	931	1,070	1,420	1,471	-
(JA) KAWASAKI HEAVY INDUSTRIES	731	800	765	1,160	1,439	1,239	1,385	1,409	1,520	1,733
(IS) I.A.I.	1,322	1,099	753	898	1,161	1,114	1,297	1,210	1,287	1,247
(US) TELEDYNE	1,793	1,467	1,247	1,309	1,331	1,155	1,081	990	-	-
(US) ROHR	778	636	577	767	948	847	1,118	986	1,004	-
(US) BEECHCRAFT (RAYTHEON)	974	882	606	802	831	843	886	966	-	-
(UK) LUCAS INDUSTRIES	550	491	613	800	894	946	1,071	868	-	-
(FR) SEXTANT AVIONIQUE	-	-	-	-	857	975	798	803	812	-
(JA) ISHIKAWAJIMA-HARIMA H.I.	590	640	590	713	803	695	781	792	1,029	-
(ES) CASA	354	305	313	532	601	764	681	693	735	807
(US) CESSNA AIRCRAFT (TEXTRON)	941	548	454	406	589	585	659	655	-	-
(US) SUNDSTRAND AEROSPACE	1,057	982	863	864	970	835	826	647	644	601
(CA) CAE INDUSTRIES	274	245	218	576	859	739	737	639	669	-
(FR) S.E.P.	333	384	493	518	614	648	650	636	631	-
(IT) AGUSTA	570	580	613	667	734	722	588	583	604	601
(US) HERCULES	1,106	921	872	890	875	782	604	574	-	-

■ SOURCE: COMPANIES (DGIII SURVEY - ANNUAL REPORTS - PRESS)

TURNOVER (cont'd)	1985	1986	1987	1988	1989	1990	1991	1992	1993 E	1994 F
(UK) WESTLAND	524	513	542	531	641	576	667	572	576	-
(IT) FIAT AVIAZIONE	310	336	365	400	536	577	529	545	534	575
(UK) SHORTS (BOMBARDIER)	341	298	319	289	325	315	506	531	530	-
(SW) SAAB AIRCRAFT	502	468	608	563	572	572	660	520	-	-
(UK) DOWTY (TI)	261	264	297	390	429	443	407	474	-	-
(SW) VOLVO FLYGMOTOR	247	267	299	345	371	315	464	451	-	-
(FR) MESSIER-BUGATTI	195	198	209	261	303	341	348	365	303	310
(FR) DASSAULT ELECTRONIQUE	277	329	387	391	436	420	345	363	406	-
(FR) TURBOMECA	266	253	267	290	308	335	379	340	-	-
(JA) FUJI HEAVY INDUSTRIES	212	234	233	314	325	279	329	332	-	-
(CA) SPAR AEROSPACE	214	140	154	185	179	226	328	309	-	-
(IN) HINDUSTAN AERONAUTICS	661	496	454	419	487	416	363	283	-	-
(BR) EMBRAER	287	384	411	442	636	457	324	257	343	-
(IT) AERMACCHI	163	159	188	170	222	263	245	234	200	-
(SW) ERICSSON RADAR (ERE)	-	-	-	278	325	251	244	220	188	-
(UK) REDIFFUSION SIMULATION	100	121	141	181	247	297	327	197	-	-
(SA) SIMERA	-	-	-	-	-	-	-	173	172	179
(BE) SABCA	71	70	82	92	107	129	151	154	138	-
(BE) TECHSPACE AERO	215	171	149	147	148	182	162	147	124	110
(HE) H.A.I.	-	-	-	-	-	69	70	95	117	133
(AU) ASTA	50	-	-	-	68	71	75	90	101	108
(PO) O.G.M.A.	24	33	30	48	65	68	82	82	75	73
(KO) DAEWOO HEAVY INDUSTRIES	-	2	4	6	13	19	39	48	64	76

WORKFORCE OF MAJOR AEROSPACE MANUFACTURERS

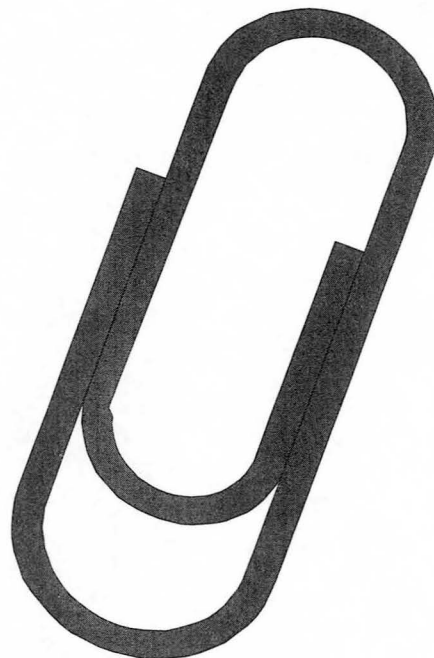
	1985	1986	1987	1988	1989	1990	1991	1992	1993 E	1994 F
(US) BOEING	98,700	118,500	136,100	147,300	159,200	161,700	157,700	133,182	116,155	109,000
(US) MC DONNELL DOUGLAS	97,067	105,696	112,400	121,421	127,926	121,190	109,123	87,377	70,000	-
(DE) DASA	52,482	54,258	55,516	58,990	79,259	80,000	83,605	81,872	73,800	67,400
(US) LOCKHEED	87,800	94,200	97,200	85,600	82,500	73,000	72,300	71,700	88,000	-
(UK) BRITISH AEROSPACE	75,645	75,480	86,760	87,623	83,260	81,869	79,024	68,220	-	-
(US) MARTIN MARIETTA	37,116	36,845	36,597	33,990	33,267	32,900	32,000	66,600	58,200	-
(US) GM HUGHES	-	79,216	76,339	75,146	66,625	67,174	63,204	62,000	-	-
(US) PRATT-WHITNEY GROUP (UTC)	43,891	46,728	46,536	46,000	45,900	45,700	44,400	40,664	33,000	30,000
(IN) HINDUSTAN AERONAUTICS	42,993	44,123	44,043	43,663	42,678	41,530	40,694	40,336	-	-
(FR) AEROSPATIALE	34,889	34,246	32,827	32,626	32,958	33,506	33,000	35,100	31,400	29,700
(US) GENERAL ELECTRIC	-	92,000	89,000	84,400	80,600	76,900	79,800	33,700	-	29,100
(US) NORTHROP	46,900	46,800	48,200	44,600	41,000	38,200	36,200	33,200	30,000	-
(UK) ROLLS-ROYCE	37,400	37,700	37,300	36,100	38,300	36,500	31,400	29,500	26,500	23,500

■ SOURCE: COMPANIES (DGIII SURVEY - ANNUAL REPORTS - PRESS)

WORKFORCE (cont'd)	1985	1986	1987	1988	1989	1990	1991	1992	1993 E	1994 F
(IT) ALENIA	27,779	27,956	28,606	29,738	31,648	30,179	30,099	28,084	26,260	-
(CA) BOMBARDIER AEROSPACE	-	5,386	5,484	5,515	13,300	16,200	17,000	21,600	21,300	-
(US) GRUMMAN	32,000	33,400	33,700	32,000	28,900	26,100	23,600	21,200	17,900	17,400
(US) TRW	38,400	28,100	30,800	28,300	27,500	25,400	23,000	18,800	-	-
(US) ROCKWELL	45,700	41,100	34,408	32,574	31,517	25,142	25,227	17,085	-	-
(US) LITTON INDUSTRIES	25,106	25,541	24,689	24,398	22,732	20,682	18,305	16,763	15,722	-
(IS) I.A.I.	22,070	21,483	20,270	17,291	16,612	16,904	17,213	16,500	12,900	12,000
(FR) SNECMA	13,862	13,918	13,434	13,482	13,955	14,192	13,816	13,405	12,542	11,767
(NL) FOKKER AIRCRAFT B.V.	10,053	10,860	11,709	11,690	12,925	13,561	12,606	12,363	10,350	9,350
(EU) EUROCOPTER INT'L	-	-	-	-	-	-	12,110	11,562	10,500	10,500
(FR) DASSAULT AVIATION	16,123	15,783	14,676	13,818	13,385	12,390	11,700	10,000	9,000	-
(US) BEECHCRAFT (RAYTHEON)	7,935	7,790	8,413	8,461	9,398	10,757	10,956	9,923	9,320	-
(CA) CAE INDUSTRIES	4,840	5,125	4,000	12,400	11,760	10,000	9,600	9,400	9,400	-
(US) ROHR	7,600	8,000	10,000	11,000	12,000	12,000	11,500	9,230	-	-
(FR) MATRA	4,846	4,933	5,017	4,747	5,086	8,000	8,100	9,000	-	-
(ES) CASA	10,238	10,591	10,548	10,370	10,138	9,544	9,338	8,999	8,500	8,300
(UK) SHORTS (BOMBARDIER)	6,587	7,216	7,203	7,679	7,837	7,877	8,366	8,982	8,250	-
(UK) WESTLAND	11,613	10,595	9,231	9,216	9,499	9,601	9,240	8,766	-	-
(US) VUGHT AIRCRAFT	9,293	9,678	9,662	10,000	10,800	10,500	9,700	8,700	6,000	5,500
(US) SUNDSTRAND AEROSPACE	9,919	10,118	10,052	9,796	9,073	8,994	8,603	8,500	7,500	-
(FR) SEXTANT AVIONIQUE	-	-	-	-	-	9,152	8,441	7,500	7,000	6,700
(IT) AGUSTA	9,793	9,703	9,711	9,888	9,826	9,300	8,343	6,900	6,500	6,500
(SW) SAAB AIRCRAFT	6,443	6,702	6,556	6,489	6,475	7,166	6,909	6,545	6,075	-
(JA) MITSUBISHI HEAVY IND.	6,270	6,200	6,480	6,470	6,500	6,650	6,480	6,400	-	-
(BR) EMBRAER	7,736	8,592	10,157	12,069	12,607	9,007	8,353	5,891	5,882	-
(UK) DOWTY (TI)	7,480	6,376	5,641	5,854	6,056	5,686	4,400	5,500	-	-
(US) CESSNA AIRCRAFT (TEXTRON)	8,900	7,800	4,100	3,600	4,100	4,900	5,200	5,500	5,800	6,000
(JA) KAWASAKI HEAVY INDUSTRIES	3,700	3,900	3,900	4,000	5,300	4,900	4,800	4,700	4,500	-
(SW) VOLVO FLYGMOTOR	3,463	3,587	3,729	3,760	3,804	3,847	4,250	4,288	-	-
(IT) FIAT AVIAZIONE	3,604	3,839	4,256	4,348	4,261	4,244	4,214	4,103	4,081	3,986
(SA) SIMERA	-	-	-	-	-	-	-	4,031	3,780	3,450
(JA) ISHIKAWAJIMA-HARIMA H.I.	3,500	3,200	3,500	3,550	3,600	3,600	3,650	3,650	3,500	-
(FR) S.E.P.	3,708	3,886	3,969	4,144	3,999	3,901	3,918	3,634	3,500	-
(FR) TURBOMECA	3,828	3,669	3,655	3,558	3,544	3,552	3,612	3,560	-	-
(CA) SPAR AEROSPACE	2,221	2,089	2,122	2,107	2,114	2,550	2,903	3,389	-	-
(US) LEARJET (BOMBARDIER)	2,705	2,599	2,640	1,940	2,851	2,786	3,112	3,356	3,800	-
(JA) FUJI HEAVY INDUSTRIES	2,130	2,179	2,344	2,572	2,768	2,750	-	3,072	-	-
(FR) DASSAULT ELECTRONIQUE	2,799	2,915	3,023	3,000	3,040	3,140	2,861	2,844	2,500	-
(FR) MESSIER-BUGATTI	2,872	2,824	2,705	2,677	2,856	2,986	2,706	2,701	2,439	2,341
(SW) ERICSSON RADAR (ERE)	-	-	-	4,230	3,682	2,843	2,815	2,696	2,700	-
(IT) AERMACCHI	2,435	2,474	2,550	2,698	2,715	3,297	3,000	2,502	2,150	-
(PO) O.G.M.A.	2,431	2,486	2,495	2,666	2,761	2,706	2,576	2,385	2,360	2,300
(AU) ASTA	2,337	-	-	-	1,800	1,950	1,900	2,200	2,100	1,800
(UK) REDIFFUSION SIMULATION	1,410	1,706	1,946	2,132	2,400	2,783	2,509	2,155	-	-
(BE) SABCA	1,458	1,598	1,621	1,614	1,677	1,776	1,882	1,711	1,400	1,300
(BE) TECHSPACE AERO	2,308	2,214	1,999	1,648	1,603	1,675	1,409	1,360	1,150	-
(KO) DAEWOO HEAVY INDUSTRIES	209	310	469	563	722	740	741	768	880	900

■ SOURCE: COMPANIES (DGIII SURVEY - ANNUAL REPORTS - PRESS)

ANNEXES



ECU EXCHANGE RATES

1 ECU =

	BFR	DM	PTA	FF	LIT	HFL	UK £	US \$	CA \$	YEN	SEK
1970	51.112	3.7414	71.36	5.6777	638.9	3.7005	0.42593	1.0222	-	368.00	-
1971	50.866	3.6457	72.57	5.7721	647.4	3.6575	0.42858	1.0478	-	363.83	-
1972	49.361	3.5768	72.00	5.6572	654.3	3.5999	0.44894	1.1218	-	339.72	-
1973	47.801	3.2764	71.81	5.4678	716.5	3.4285	0.50232	1.2317	-	333.17	-
1974	45.912	3.0867	68.84	5.6745	791.7	3.1714	0.51350	1.2021	1.1704	339.68	5.2404
1975	45.569	3.0494	70.27	5.3192	809.5	3.1349	0.56003	1.2408	1.2355	360.73	5.1413
1976	43.166	2.8155	74.74	5.3449	930.2	2.9552	0.62158	1.1180	1.1023	331.21	4.8666
1977	40.883	2.6483	86.82	5.6061	1,006.8	2.8001	0.65370	1.1411	1.2140	305.81	5.1193
1978	40.061	2.5561	97.42	5.7398	1,080.2	2.7541	0.66391	1.2741	1.4537	267.08	5.7494
1979	40.165	2.5110	91.97	5.8298	1,138.4	2.7488	0.64630	1.3705	1.6056	300.46	5.8717
1980	40.598	2.5242	99.70	5.8690	1,189.2	2.7603	0.59849	1.3923	1.6261	315.04	5.8810
1981	41.295	2.5139	102.68	6.0399	1,263.2	2.7751	0.55311	1.1164	1.3379	245.38	5.6347
1982	44.712	2.3760	107.56	6.4312	1,323.8	2.6139	0.56046	0.9797	1.2082	243.55	6.1434
1983	45.438	2.2705	127.50	6.7708	1,349.9	2.5372	0.58701	0.8902	1.0967	211.35	6.8212
1984	45.442	2.2381	126.57	6.8717	1,381.4	2.5234	0.59063	0.7890	1.0207	187.09	6.5110
1985	44.914	2.2263	129.13	6.7950	1,448.0	2.5110	0.58898	0.7631	1.0420	180.56	6.5213
1986	43.798	2.1282	137.46	6.7998	1,461.9	2.4009	0.67154	0.9842	1.3673	165.00	6.9957
1987	43.041	2.0715	142.16	6.9291	1,494.9	2.3342	0.70457	1.1544	1.5302	166.60	7.3100
1988	43.429	2.0744	137.60	7.0364	1,537.3	2.3348	0.66443	1.1825	1.4559	151.46	7.2419
1989	43.381	2.0702	130.41	7.0239	1,510.5	2.3353	0.67330	1.1017	1.3043	151.94	7.0994
1990	42.426	2.0521	129.41	6.9141	1,522.0	2.3121	0.71385	1.2734	1.4854	183.66	7.5205
1991	42.223	2.0508	128.47	6.9733	1,533.2	2.3110	0.70101	1.2392	1.4198	166.49	7.4793
1992	41.593	2.0203	132.53	6.8484	1,595.5	2.2748	0.73765	1.2981	1.5686	164.22	7.5330
1993 E	40.399	1.9382	149.58	6.6529	1,821.6	2.1790	0.77745	1.1655	1.4957	128.27	9.0326
1994 F	40.731	1.9213	157.31	6.7228	1,829.2	2.1616	0.75835	1.1228	1.4575	115.39	9.1370

■ SOURCE: COMMISSION SERVICES

GROSS DOMESTIC PRODUCT AT MARKET PRICES

BILLION ECU AT CURRENT PRICES

	BE	DE	ES	FR	IT	NL	UK	EU	USA	CAN	JAPAN
1970	24.7	180.5	37.2	139.8	105.1	33.5	121.2	678.3	989.6	-	199.3
1971	27.2	205.7	41.3	153.2	112.7	38.2	134.4	752.3	1,048.0	-	221.8
1972	31.3	230.1	48.8	174.6	122.0	43.9	143.6	838.9	1,076.8	-	272.0
1973	36.7	280.0	59.0	206.6	135.0	52.6	147.5	970.3	1,096.5	-	337.7
1974	44.8	318.8	75.4	229.6	154.3	64.5	163.0	1,112.5	1,215.0	129.0	395.2
1975	49.8	336.7	86.7	276.0	171.3	71.9	188.6	1,248.9	1,279.5	137.7	411.2
1976	59.7	398.0	98.1	318.2	188.0	87.3	201.1	1,431.7	1,583.5	178.1	502.9
1977	68.1	451.3	107.1	342.1	212.9	100.6	222.9	1,594.6	1,731.1	178.0	607.0
1978	74.6	502.2	116.8	380.3	234.7	110.5	253.2	1,768.8	1,749.9	164.8	765.3
1979	79.4	552.9	144.7	425.6	272.2	117.7	306.1	2,004.9	1,813.9	170.7	737.4
1980	85.0	583.2	154.3	478.5	326.0	124.9	386.4	2,250.4	1,945.1	189.2	762.4
1981	86.6	610.6	167.3	524.0	367.3	130.2	459.6	2,472.8	2,719.3	264.2	1,051.3
1982	87.0	668.4	184.0	563.8	411.8	144.5	496.2	2,699.3	3,217.8	307.7	1,111.1
1983	90.8	734.9	176.3	591.7	469.2	153.8	516.8	2,884.6	3,813.0	366.8	1,333.2
1984	97.5	782.3	200.6	634.8	525.4	162.5	549.9	3,117.4	4,770.0	432.4	1,606.4
1985	105.6	818.9	218.4	691.7	559.8	170.6	604.6	3,347.3	5,263.5	455.2	1,774.6
1986	114.0	904.7	235.2	745.5	615.6	182.8	571.3	3,554.9	4,298.7	366.7	2,027.9
1987	121.1	960.9	254.2	770.2	658.1	188.7	599.4	3,745.5	3,895.2	357.3	2,091.4
1988	128.3	1,010.4	291.9	815.1	710.2	195.9	706.9	4,065.6	4,104.9	412.7	2,452.3
1989	139.5	1,074.5	345.1	876.9	790.1	207.5	762.8	4,420.7	4,724.1	494.0	2,607.6
1990	151.5	1,178.2	387.3	939.0	862.1	223.3	768.5	4,753.6	4,291.5	445.1	2,318.1
1991	159.2	1,364.7	426.5	970.3	930.5	235.2	816.5	5,164.7	4,527.8	469.7	2,720.4
1992	169.5	1,488.5	442.7	1,029.9	944.7	248.3	804.8	5,411.0	4,530.3	433.2	2,847.6
1993 E	177.9	1,585.9	407.1	1,082.6	862.3	262.5	798.3	5,467.5	5,307.0	477.3	3,731.6
1994 F	183.6	1,659.1	411.3	1,101.9	913.9	272.4	873.2	5,716.5	5,812.3	522.1	4,301.6

■ SOURCE: COMMISSION SERVICES

GROSS DOMESTIC PRODUCT AT MARKET PRICES

BILLION ECU AT 1985 PRICES AND 1985 EXCHANGE RATES

	BE	DE	ES	FR	IT	NL	UK	EU	USA	CAN	JAPAN
1970	73.8	593.6	144.7	467.1	359.6	121.7	451.7	2,618.9	3,554.0	252.7	951.3
1971	76.5	611.2	151.6	489.2	365.3	127.1	461.1	2,706.1	3,661.6	267.0	991.0
1972	80.6	637.4	163.9	508.3	377.5	131.4	477.9	2,815.1	3,842.0	281.9	1,072.8
1973	85.3	668.9	176.4	536.4	402.5	137.3	511.2	2,994.8	4,040.5	304.1	1,153.8
1974	88.7	670.6	186.0	551.0	424.0	142.7	503.9	3,047.9	4,021.1	317.0	1,147.4
1975	87.5	660.6	187.2	548.3	414.5	142.6	499.4	3,016.7	3,985.6	325.2	1,180.3
1976	92.3	696.1	193.1	572.7	440.8	150.0	512.8	3,119.2	4,187.7	345.6	1,230.0
1977	92.7	715.9	198.9	592.9	455.6	153.4	525.4	3,139.0	4,372.7	357.6	1,288.3
1978	95.3	737.3	201.6	613.0	473.2	157.3	543.7	3,181.3	4,572.2	374.5	1,350.9
1979	97.3	768.0	201.6	632.8	501.1	160.9	559.8	3,292.1	4,687.4	388.5	1,425.1
1980	101.5	776.0	203.9	641.8	521.9	162.4	547.6	3,309.4	4,669.5	394.3	1,478.0
1981	100.4	777.3	203.4	649.6	525.3	161.3	540.2	3,297.1	4,758.7	409.2	1,529.6
1982	102.0	770.3	205.9	664.5	526.5	159.0	549.7	3,271.9	4,652.2	396.0	1,579.2
1983	102.5	782.3	209.8	669.3	531.5	161.2	569.2	3,237.5	4,813.9	408.5	1,620.5
1984	104.7	803.3	213.5	679.3	545.4	166.3	582.9	3,291.9	5,110.7	434.8	1,689.9
1985	105.6	818.9	218.4	691.7	559.8	170.6	604.6	3,347.3	5,263.5	455.2	1,774.6
1986	107.1	837.2	225.3	708.5	576.0	174.0	629.4	3,376.0	5,398.5	469.9	1,820.4
1987	109.3	849.1	238.0	723.9	594.4	175.3	660.2	3,426.8	5,559.0	489.5	1,895.6
1988	114.7	880.7	250.4	754.3	618.6	180.0	688.6	3,572.6	5,777.4	513.9	2,012.8
1989	119.0	910.8	262.3	782.7	636.5	188.3	703.2	3,708.6	5,930.6	525.8	2,107.8
1990	123.1	956.8	272.0	800.8	650.0	195.6	706.7	3,793.8	5,967.8	522.7	2,218.1
1991	125.5	1,063.6	278.2	809.6	658.1	200.1	690.7	3,918.6	5,891.5	513.2	2,316.2
1992	126.3	1,092.9	280.8	820.5	664.2	203.6	686.6	3,932.4	6,016.0	517.6	2,348.1
1993 E	124.8	1,081.2	279.8	814.7	664.7	202.5	696.9	3,842.2	6,168.6	533.6	2,362.7
1994 F	126.0	1,093.0	283.6	820.9	675.1	204.5	713.9	3,886.1	6,325.5	557.9	2,411.4

■ SOURCE: COMMISSION SERVICES

GDP DEFLATOR AT MARKET PRICES

1985 = 100 - IN NATIONAL CURRENCY

	BE	DE	ES	FR	IT	NL	UK	EU	USA	CAN	JAPAN
1970	38.1	51.1	14.2	25.0	12.9	40.6	19.4	25.9	37.3	33.6	42.7
1971	40.2	55.1	15.3	26.6	13.8	43.8	21.2	27.8	39.3	34.7	45.1
1972	42.7	58.0	16.6	28.6	14.6	47.9	22.9	29.8	41.2	36.7	47.7
1973	45.8	61.6	18.6	31.0	16.6	52.3	24.6	32.4	43.8	39.9	54.0
1974	51.6	65.9	21.6	34.8	19.9	57.1	28.2	36.5	47.6	45.7	64.8
1975	57.8	69.8	25.2	39.4	23.1	62.9	35.9	41.4	52.2	50.2	69.6
1976	62.2	72.3	29.4	43.7	27.4	68.5	41.4	45.9	55.4	54.5	75.0
1977	66.9	75.0	36.2	47.6	32.5	73.1	47.1	50.8	59.2	58.0	79.8
1978	69.8	78.2	43.7	52.4	37.0	77.0	52.5	55.6	63.9	61.4	83.8
1979	73.0	81.2	51.1	57.7	42.7	80.1	60.0	60.9	69.5	67.7	86.1
1980	75.7	85.2	58.4	64.4	51.3	84.6	71.7	68.0	76.0	74.9	90.0
1981	79.3	88.7	65.4	71.7	61.0	89.2	79.9	75.0	83.6	82.9	93.4
1982	84.9	92.6	74.4	80.3	71.5	94.6	85.9	82.5	88.8	90.1	94.9
1983	89.6	95.8	83.0	88.1	82.3	96.4	90.5	89.1	92.4	94.5	96.3
1984	94.3	97.9	92.1	94.5	91.9	98.2	94.6	94.7	96.5	97.4	98.5
1985	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1986	103.8	103.3	111.1	105.3	107.9	100.5	103.5	105.3	102.7	102.4	101.8
1987	106.2	105.3	117.6	108.5	114.3	100.1	108.6	109.3	106.0	107.2	101.8
1988	108.1	106.9	124.2	111.9	121.9	101.2	115.8	113.8	110.1	112.2	102.2
1989	113.2	109.7	132.9	115.8	129.5	102.5	124.0	119.2	115.0	117.6	104.1
1990	116.2	113.5	142.7	119.3	139.4	105.1	131.8	125.3	120.0	121.4	106.3
1991	119.3	118.2	152.5	123.0	149.7	108.2	140.7	131.8	124.8	124.7	108.3
1992	124.3	123.6	161.8	126.5	156.7	110.5	146.8	137.6	128.1	126.0	110.3
1993 E	128.2	127.7	168.5	130.1	163.2	112.5	151.2	142.3	131.4	128.4	112.2
1994 F	132.1	131.0	176.7	132.8	171.0	114.7	157.5	147.1	135.2	130.9	114.0

■ SOURCE: COMMISSION SERVICES

Index of Abbreviations and Signs Used

EU BE + DE + DK + ES + FR + HE + IR + IT + LX + NL + PO + UK

EUR Western Europe

intra-EU between EU Member States only

extra-EU with countries not Member of the EU

EU European Union

ECU European Currency Unit

BE Belgium

BFR Belgian Franc

DE Germany

DM German Mark

DK Denmark

DKR Danish Crown

ES Spain

PTA Peseta

FR France

FF French Franc

HE Greece

DRA Drachma

IR Ireland

IR £ Irish Punt

IT Italy

LIT Italian Lira

LX Luxembourg

NL Netherlands

HFL Dutch Guilder

PO Portugal

ESC Escudo

UK United Kingdom

UK £ Pound Sterling

AUS Australia

AU \$ Australian Dollar

CAN Canada

CA \$ Canadian Dollar

JPN Japan

YEN Japanese Yen

SWE Sweden

SEK Swedish Crown

USA United States of America

US \$ US Dollar

GDP Gross Domestic Product

R&D Research and Development

ICAO International Organization for Civil Aviation

O.E.C.D. Organization for Economic Cooperation and Development

AEA Association of European Airlines

Mio million

e or E estimate

- or NA data not available

f or F forecast